THE DIPPER.

"It is an enigma amongst birds."

KEARTONS' NATURE PICTURES

BEAUTIFULLY REPRODUCED IN PHOTOGRAVURE, COLOUR, AND BLACK AND WHITE FROM PHOTOGRAPHS BY RICHARD AND CHERRY KEARTON

WITH DESCRIPTIVE TEXT
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"Each pair clings tenaciously to its own particular reach of stream."

THE DIPPER

THE Dipper loves to haunt clear rocky mountain streams where the water tumbles in gurgling song from ledge to ledge, and swirls away in hurrying eddies round moss-clad boulders. The happiest hours of my life have been spent with this bird and a trout rod. I have always loved its low, sweet song, its quaint ways, and its beautiful surroundings. It is an enigma amongst birds—a sort of mixture of the song thrush and brown wren, with the habits of a cormorant. Although not provided with webbed feet, or even lobed toes, it secures nearly all its food under water. Many people have an idea that it can walk beneath the water, but a little reflection would convince them of the impossibility of such a feat. The specific gravity of the creature is too nearly akin to that of a cork, and if it be watched from the top of a bridge, or other eminence commanding a good view of a pool in a clear stream, it will be seen literally to swim under water, making use of both its wings and feet. It must be gifted with wonderful eyesight, for it will frequently enter a stream in flood when the water is quite turbid.

There is, perhaps, no bird without webbed feet that walks less than the Dipper, for, besides an occasional hop from one stone to another, whilst searching for its insect food amongst pebbles in a shallow place, it hardly appears to use its feet at all for purposes of locomotion.

The song of this species is uttered in autumn, winter, and spring. It is very sweet and melodious, but exceedingly low, considering the size of the vocalist, and the competitive chatter of the brook beside which it is often uttered.

It is a bird of solitary and conservative habits; each pair clings tenaciously to its own particular reach of a stream, and drives all intruders of the same

species mercilessly away. You may try as much as you like, but you cannot drive

A YOUNG DIPPER.

the Dipper right off its own length of river. When it has reached its limit, up or down stream, it will fly round you and away back to its accustomed haunts.

The architecture of the nest is very similar to that of the brown wren, only cleverer. The structure is made of moss, dead leaves, and dry grass, with the entrance hole so cunningly hidden by the overhanging roof that it does not easily give the bird's secret away, or allow any stray splash of water from the tumbling cascade near which it is frequently built to gain entrance.

The same nesting site is frequently used year after year without intermission. It is generally near a waterfall, and sometimes quite behind it, the bird having to fly through the limpid cascade on entering and leaving her home. I have found it, however, in trees overhanging streams, under bridges, in culverts, where it was almost in total darkness, and on boulders in mid stream.

The eggs generally number five or six, and are white without any kind of markings. The young in their first coat of feathers do not have white breasts.

The Green Lizard.

"The Green Lizard is a beautiful creature."

THE GREEN LIZARD

THIS handsome reptile measures from twelve to fifteen or even eighteen inches in length, the greater part of which is accounted for by its abnormal sized tail. Its legs are short, strong, and furnished with five toes, the second from the outside being the longest, and the third and fourth of about equal length. The tongue is long, slender, and forked, and is frequently obtruded when its owner is either vexed or alarmed.

The Green Lizard is a beautiful creature, exhibiting a rich and varied mixture of verdant hues dotted and marked with yellow and brown. The head is covered with large, angular scales, the body with small ovate ones, and the tail with numerous scaly rings.

This reptile has sometimes been confused in England with the Sand Lizard, on account of the latter creature having a more or less green tinge on its sides; but, of course, the species under notice is much more brilliantly coloured, larger, and rarer in this country.

Figuier says that the Green Lizard exhibits great fear of snakes, and fights courageously in defence of its life when it cannot avoid an enemy of this character, but shows no alarm at the approach of man. My very limited experience of the creature enjoying its liberty leaves me somewhat in doubt as to the unqualified accuracy of the latter part of the statement; but I am in a position to corroborate the portion referring to its courage, for the specimen figured in our illustrations attacked me with such ferocity, when I cut off its retreat to a hole that promised safety on a chalk hill-side, that I was able to lift it off the ground whilst it viciously gripped one of my finger-tips between its wee, sharp teeth.

This species is common in all the warmer parts of Europe, on the African shores of the Mediterranean Sea, and

GREEN LIZARD.

in the Channel Islands. It has occasionally been found along the South coast of England, and notably in the neighbourhood of Eastbourne, where the natural conditions are practically the same as in Northern France. Some naturalists are therefore of opinion that it is indigenous to our soil, whilst others, on the contrary, think that the few specimens met with in this country have either escaped from captivity or been brought from the Continent and released by admirers desirous of seeing the creature establish itself as a breeding species in the British Islands. Personally, I should like to see it become common, for it is certain that its attractive appearance and harmless habits would do nothing but add to the interest of the country-side.

Like its congeners, the Common and Sand Lizards, it is very partial to basking in sunshine and lives upon flies and other forms of insect life, in the capture of which it shows astonishing activity.

Female Dartford Warbler and Young.

"Both parents engage in the task of feeding the young."

THE DARTFORD WARBLER

THE Dartford Warbler is one of our rarest resident British birds. It received its popular name through being discovered by Dr. Latham on Bexley Heath, near Dartford, in 1773. This species inhabits furze-clad commons and heaths in the south of England, and has rarely been met with breeding on the northern side of the Thames.

The male sings on the wing, and like its relative, the common whitethroat, goes through many grotesque antics whilst doing so. In the spring he is particularly vociferous about sunset, whilst perched on the topmost spray of a furze-bush. If disturbed, he slips down into the thickest cover available, and, flying stealthily to another bush, recommences his vocal efforts.

The Dartford Warbler never appears to take long flights, and is very elusive when being followed. I have over and over again known one drop into deep heather, and, when searched for at the place where it alighted, disappear as completely as if the earth had opened and swallowed it up.

The bird's alarm note is an oft-repeated *cha, cha,* which appears to be louder and harsher in the case of the female than her mate.

Both parent birds engage in the task of feeding the young upon small caterpillars and other forms of insect life. Should any object calculated to excite the suspicion of the male happen to be near the nest when he returns he may some-

times be heard to sing, even whilst his bill is crowded with insects.

DARTFORD WARBLER'S NEST.

The nest, although more substantial, is somewhat like that of the common whitethroat, and is formed of dead grass stems, rootlets, wool, rabbits' down, and, occasionally, feathers. I have seen several specimens built in rough heather, and my friend, Mr. Howard Bentham, who has given the species a great deal of attention, and has probably found more nests than any other man in this country, tells me that something like three-fourths of those he has discovered have been built in heather and the remainder in furze. The one figured in our plate was made in a small dead furze-bush surrounded by tall heather.

The eggs number four or five. They are very similar, as a rule, to those of the whitethroat, being greenish or buffish white in ground colour, liberally sprinkled all over with dark olive brown and underlying grey markings.

The Dartford Warbler generally carries its tail at the angle shown in the photogravure, and frequently erects the feathers on the crown of its head in such a way as to suggest a crest. Its whole length is about five inches. The head, neck, and upper parts are greyish black, whilst the throat, breast, and sides are chestnut brown. The female, as might be expected, is less richly coloured.

Curlew on Nest.

"The most magnificent and interesting wader that breeds in the British Isles."

THE COMMON CURLEW

THE Common Curlew is in my opinion the most magnificent and interesting wader that breeds in the British Isles. Its wonderful intelligence and wariness always render it one of the most fascinating subjects for me to circumvent and portray with my camera. For upwards of twenty years I lived and wandered amongst the solitudes of the Yorkshire moors within sound of its noble voice, and I never hear the bird's thrilling notes again without having my soul stirred to ecstasies within me. Quite recently I have succeeded in taking moving pictures of the Whaup—as the bird is called in Scotland—going on to her nest, hustling her eggs into position beneath her, and leaving again to chase a marauding crow away from her neighbourhood, and, as sportsmen and shore gunners well know, this is an achievement of which anybody could be legitimately proud.

This species lives upon the seashore during the winter months, picking up sand worms, mollusca, and all kinds of marine trifles. Here it displays the most wonderful intelligence, for, resting upon some fallow field miles away from the sea during high tide, the bird knows by some mysterious means the precise moment at which the ebb will leave a favourite sandbank shallow enough to be waded, and away hies the whole flock in its full strength.

During March and April such birds as intend to breed leave the seaside in pairs for their nesting-ground on moors, uplands, and undrained pastures in the north of England, Wales, Scotland, and Ireland.

The nest consists simply of a few short bits of dead grass, rushes, or heather placed in a slight hollow amongst coarse grass, tufts of short rushes, or stunted

heather, and ling. The eggs, usually numbering four—although only three

YOUNG CURLEW HIDING.

may sometimes be found—are pyriform in shape, and olive-green or brownish-buff in ground colour, blotched and spotted with dark green and blackish-brown.

Young Curlews leave the nest directly they are hatched, and until they can fly, at any rate, show the most implicit obedience to parental authority. I have many times watched them through my glasses wandering about in search of food, and noted that upon the first sound of an alarm note, given by one of their elders, they crouch flat upon the ground, and keep quite still until they are warned by an assuring parental cry that the danger has passed.

Adult Curlews manifest great courage in the defence of their helpless chicks, and may frequently be seen driving crows, rooks, merlins, kestrels, and even sparrow hawks away from their breeding grounds.

Although apparently ill-adapted for perching in trees, I have on several occasions watched Curlews resting on the tops of dead larches in Westmorland.

During the summer months they feed largely upon beetles, and at this season their long bills become very useful in extracting such species as the dor from its burrow.

THE WILLOW WREN.

"A bold and particularly restless bird."

"The number of caterpillars, small moths, flies, and other insects consumed by the young birds in the course of an hour is most astonishing."

THE WILLOW WREN

THE Willow Wren, or Willow Warbler as it is also known, is one of our most familiar and sprightly feathered visitors. Arriving in March and April, it speedily makes every suitable grove throughout the land ring with its sweet and oft-repeated melody. To the ornithologist it is of peculiar interest, for he always associates its delicious warbling with the warm sunshine, bursting buds, and scent-laden air that bespeak Nature doing and donning her best to make the heart of man rejoice within him.

It is a bold and particularly restless bird, especially when labouring under any kind of anxiety produced by a real or fancied danger near its nest, and will in such circumstances hop from twig to twig, and bough to bough, in a most ceaseless and untiring manner. Curiously enough both the song and call notes of this species bear considerable similarity to those of the chaffinch, and it requires a man with a well practised ear to say with certainty which bird is producing the plaintive *t-wheet t-wheet* so often heard in our woods and groves during May and June.

The Willow Wren builds a dome-shaped nest, with a somewhat large entrance-hole in front. It is composed of dead grass, moss and sometimes fern fronds, with an inner lining of hair and feathers. As a rule it is placed on the ground in a bank, or at the foot of a hedgerow, but may occasionally be found in a hole in an old wall or amongst ivy growing six or seven feet from the ground. The eggs, numbering from four to seven, or even eight, are white in colour spotted with pale rusty red. They may easily be distinguished from those of the chiffchaff, a closely allied

species, which lays white eggs marked with dark purplish brown.

WILLOW WREN'S NEST.

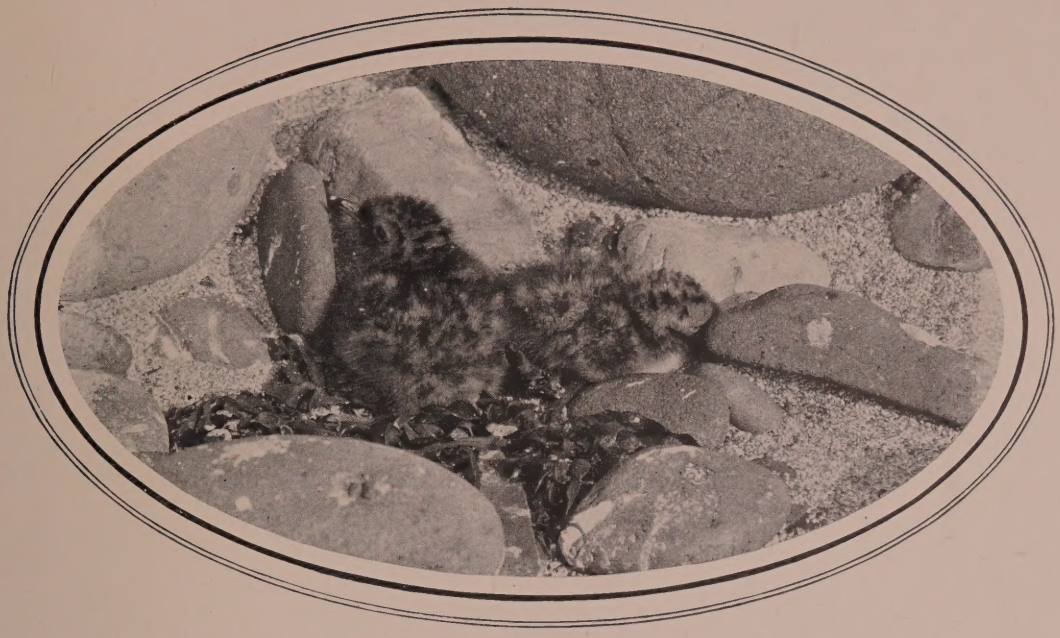
The Willow Wren is an insect eater pure and simple, and as such renders great service to the gardener. The male helps the female to feed the chicks, and the number of caterpillars, small moths, flies, and other insects consumed by the young birds in the space of an hour is astonishing; their appetite, indeed, appears to be insatiable.

From observations made whilst watching a sparrow hawk feed her young, I have come to the conclusion that great numbers of fledgling Willow Wrens are captured and carried away by this wily marauder directly they leave the nest.

This species is far more numerous than its relatives, the wood wren and the chiffchaff, and during a single breeding season I may safely say that I have found and been shown dozens of nests in the woody gorges and ghylls amongst the Westmorland and Cumberland Fells.

Towards the end of July Willow Wrens commence to retreat in a southerly direction, and may frequently be seen searching flower and vegetable gardens for insects, and during August and September old and young wing their way across the sea to their winter quarters in Africa.

Arctic Tern on Nest.



"The chicks leave the nest soon after they have been hatched and crouch amongst the stones and sand."

THE ARCTIC TERN

THIS bird enjoys a very wide geographical distribution, being found at different seasons of the year in places as far apart as Spitzbergen and Madagascar, Hudson's Bay and Brazil. It arrives in the British Islands during April and May, and after the breeding season wings its way again in a southerly direction throughout September and October.

This species breeds farther north than its congener the Common Tern, but does not, like it, make use of the margins of bodies of fresh water. At many breeding stations round our coast, such as the Farne Islands, it nests with the Common Tern, but in the Shetlands it is alone in this respect.

It is a bold bird, and individuals in a colony will sometimes not hesitate to attack even human intruders. On one occasion I was repeatedly struck on the head by an infuriated Arctic Tern, which did not cease to assail me until I withdrew from the neighbourhood of its nest containing newly-hatched young ones.

The din produced by the harsh, sharp pirring notes of these birds when a large colony is visited is well-nigh deafening. They fly round and round the visitor in bewildering confusion, scolding until the object of their resentment has departed, when they settle down again to the duties of incubation, and comparative peace reigns once more. If lesser black-backed gulls should happen to be breeding near by, the Terns are kept in constant trepidation of their marauding visits after eggs or young. I have often seen a gull under such circumstances severely mobbed by a number of infuriated Terns, and the late Dr. Saxby records the witnessing of a

ARCTIC TERN'S EGGS.

thieving hoody crow being slain outright.

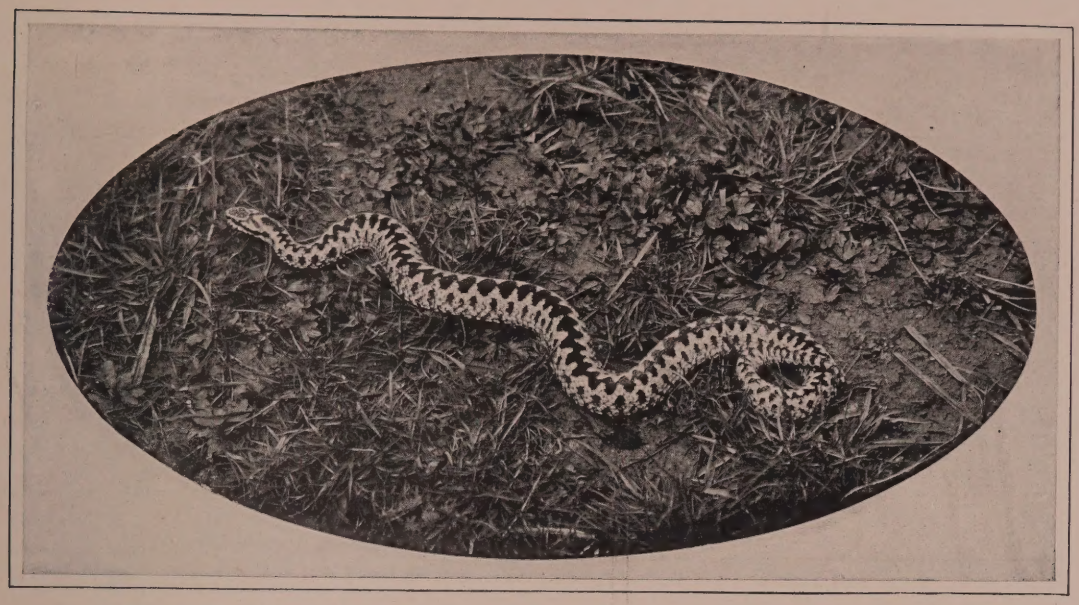
When searching for food, the members of this species fly at some little height over the sea, diligently looking for small surface-swimming fishes. Directly one is espied, the bird halts in the air, pauses for an instant to steady itself and then makes a headlong plunge, striking the water with a splash. Many small sand eels are secured for the consumption of the young.

The Arctic Tern lays two, and occasionally three, eggs of a bluish-green or brownish-buff ground colour, spotted and blotched with brown and grey. Generally speaking, no nest of any kind is prepared for their reception, but occasionally a few bits of dead grass or seaweed may be found beneath them.

At some breeding stations the eggs lie about on sand and shingle in such profusion that it is necessary to examine the ground at every step to avoid treading upon and crushing some of them.

The chicks leave the nest soon after they have been hatched and crouch amongst the stones and sand, with the colours of which their down frequently harmonises very closely. Later on the clutches mingle with each other to such an extent that it is difficult to understand how the parent birds distinguish their own offspring upon returning home with food.

Viper or Adder.



"The Adder enjoys the distinction of being our one and only poisonous reptile."

THE ADDER, OR VIPER

THE Adder, or Viper, measures from eighteen to twenty-five inches in length, and the ground colour of its body varies from black to white; red varieties are occasionally met with.

During the summer of 1909 I saw a specimen which was almost coal black all over its body. This reptile may be easily distinguished from the common and smooth snakes by the well-defined V on the top of its head; the black or blackish-brown zigzag markings along its back, and the fact that its tail is short and stout. It is common in many parts of England, Wales, and Scotland, but is not found in Ireland.

The Adder enjoys the distinction of being our one and only poisonous reptile, but it will not bite except in self-defence. During the last twenty years I have caught a considerable number, but have never been bitten, and when I have run any risk it has been due to my own carelessness or folly. Quite recently I was told that if a Viper be seized by the tail and jerked like a whip lash when making a crack, its head will fly off. I tried the experiment, but the creature's head remained on and I narrowly escaped being bitten.

Dry heaths, sandy wastes, and rough pasture-land, covered here and there with brushwood, are the favourite haunts of the Adder; and field voles, mice, lizards, frogs, and birds' eggs and young form its staple diet. It hibernates throughout the winter months and glides forth in search of food and revivifying sunshine—to which it is very partial—in the early spring. It is more in evidence during April and May than at any other season on account of the fact that the state of the vegetation does not afford such opportunities for hiding as it does during later and more luxuriant periods of the year. If disturbed whilst

THE ADDER.

sunning itself on a bank, the Viper glides stealthily away into a bunch of heath, tangle of dead grass, or down an old run excavated by a mole or field vole.

This reptile, unlike the common snake, does not lay eggs. It is viviparous, and brings forth, as a rule, from ten to fifteen young ones each season. I have upon occasion found a gravid female with only seven young ones inside her. On the other hand it has been asserted that as many as forty may be found in one family. This statement appears to be open to considerable physiological improbability, and I doubt its accuracy. There is a widely accepted popular belief to the effect that when a family of young Adders is in danger the dam opens her mouth and they take refuge by crawling down her throat, but although rewards have long been offered for a specimen with young ones in its stomach, significantly enough nobody has ever come forth with a claim that would bear scientific investigation.

Soon after resuming an active life in the spring, the creature sloughs its old faded skin and emerges in brighter, cleaner colours.

Woodcock on Nest.

WOODCOCK'S NEST AND EGGS.

has been obtained during recent years. The Duke of Northumberland's keepers mark all the young "Cocks" they find at Alnwick, and by this means it has been proved that birds bred in that historic neighbourhood have been shot all over the British Islands, and even as far away as Brittany.

The Woodcock nests in forests, plantations, and coppices. The structure is composed of a few dead leaves, bits of dry grass, or fern fronds, placed in a hollow. Sometimes it is situated quite in the open, and at others hidden under brambles, where very little of the sitting bird can be seen.

The eggs generally number four, although upon rare occasions as many as five have been found in a clutch. They vary from yellowish-white to buffish-brown in ground colour, and are marked with pale chestnut brown and ash-grey.

The young ones in their beautiful coats of variegated brown velvety down soon leave the nest, and when in danger, or require transporting to fresh feeding ground, the mother bird sometimes carries them. This wonderful feat is accomplished by holding the chick between her depressed bill and breast, in her claws, or between her thighs. I have only had the pleasure of seeing it done once, and the last-named method was employed.

A YOUNG HERON.

Waiting to be taught "the gentle art of catching frogs."

A Young Heron.

THE HERON

IN the romantic days of falconry the Heron was held in high esteem on account of the sport it afforded. Breech-loaders and battues, however, have robbed it of its glory, and it is now disregarded by nearly everybody except the trout angler, whose cordial dislike it earns through committing so much havoc in the ranks of his favourite fish, especially throughout the spawning season, when they are particularly accessible.

It breeds nearly all over the country, but nowhere, I imagine, in such large colonies as in former days, when Pennant counted over eighty nests in a single tree standing in a Lincolnshire heronry.

The nest is a somewhat bulky structure, made of sticks and twigs, lined with turf, moss, fibrous roots, and occasionally, it is said, with wool and rags, although personally I have never seen either of the last-named materials used. It is generally placed near the top of a high tree in a plantation or wood, but the bird readily adapts itself to circumstances, and in Ireland frequently builds on bushes growing upon islands in lakes, or even upon the ground. I have seen nests in cliffs in the Outer Hebrides and elsewhere.

The eggs, numbering from three to five, are of a pale bluish green colour. In open seasons this species will sometimes commence to breed as early as January. It is said to be double brooded, and in the Island of Skye I have seen eggs as late as the month of June.

Although there would appear to be an everlasting feud between rooks and Herons, they frequently breed in proximity to each other, and whenever a

skirmish occurs the former birds appear to be the aggressors.

HERON'S NEST.

Herons feed upon fish of different kinds, eels, frogs, rats, voles, mice, and occasionally birds. In the Hebrides I have watched them catch both small crabs and lobsters on the seashore. Some idea of the power which the bird can put into a blow of its bill when spearing a fish or mammal may be gathered from the fact that a wounded one has been known to drive it through a boy's cheek and knock out a molar.

Curious beliefs exist in different parts of the country as to the bird's supposed powers to attract fish. In Cumberland many anglers have a rooted conviction that it emits oil from its legs whilst standing in the water, and that this exercises some fascinating influence over its hungry prey. There is also another widely prevalent idea that the creature shakes a fine grey powder from its plumage, and the particles floating upon the water arouse the curiosity of the finny tribes and allure them within reach of the lightning-like stroke of their enemy's bill.

When young Herons leave the nest they frequently alight with their parents in the middle of some large open field as storks do on the Continent; but whether this is for purposes of safety, or in order that they may be taught the gentle art of catching frogs, it is difficult to say.

Meadow Pipit.

"Its chicks frequently form the staple diet of the offspring of the merlin."

THE MEADOW PIPIT

THE Meadow Pipit, or Titlark, as it is very frequently called, is one of the most numerous and widely distributed birds of the British Islands. It breeds practically everywhere, alongside coot and water-rail on broad and mere, in proximity to gull and guillemot on the seashore, and on the lonely mountain top where ptarmigan and golden plover hold almost undisputed sway. It is, however, most numerous in high moorland districts, where it is no uncommon thing to find as many as half a dozen nests in a day's wander, without troubling to look for them.

This species is smaller than either the Rock Pipit or the Tree Pipit, to both of which it is closely related, but, although it will rear its young ones wherever they rear theirs, I have never met with the former nesting away from the sound of the sea, or the latter at any distance from trees of some kind.

The Meadow Pipit is a resident British bird, those breeding on high ground resorting to lower country in winter, and having their numbers considerably augmented by arrivals from the Continent.

The male is a persistent vocalist; mounting the air to a height of some thirty or forty feet, he delivers the greater portion of his shrill ditty whilst gliding slowly down with outstretched wings to some favourite boulder, stunted bush, or old stone wall, at no great distance from his sitting mate. Although the song is easily distinguished from that of the Tree Pipit by anyone acquainted with the accomplishments of both species, the difference is not easily described on paper. It may, however, without doing the bird an injustice, be put down as shriller and less musical.

A hole beneath an overhanging tuft of grass, rushes, or heather, is generally selected for the nest, but it may sometimes be found in a cleft of rock or beneath a stone in such a position as

would satisfy a young and careless wheatear. The structure, which is neat

MEADOW PIPIT'S NEST.

and compact, is composed of bents and fine dead grass, with an occasional admixture of horsehair. The eggs number from four to six, although five is usually the commonest clutch. They are greyish white in ground colour, and thickly covered with light to dusky brown spots. In many specimens the markings converge to such an extent that they make a dark brown mass, especially round the larger end. They always lack the warm tint which is so characteristic of the eggs of the Tree Pipit.

This wee brown bird is pre-eminently useful to the cuckoo, for it rears a greater number of young belonging to that parasitic species than any other British bird, whilst its own chicks frequently form the staple diet of the offspring of the merlin.

It shows its relationship to the wagtail family by the constant, if slower, movements of its caudal appendage, and generally betrays the presence of its nest containing young by hovering round, meanwhile uttering notes that sound like *trit, trit, trit.*

Field Vole.

"The head is rather large for the size of the creature."

THE FIELD VOLE

THE Field Vole, or Short-Tailed Field Mouse, as it is frequently called, measures from three and three-quarter inches to four and three-quarter inches in length. About one-third of this is accounted for by the animal's somewhat slender hair-clad tail. The head is rather large for the size of the creature, and the ears longer proportionately than those of the Water Vole. The fur on the animal's upper parts is greyish brown and greyish white underneath.

It breeds practically all over Europe, and although common in England, Scotland, and Wales, is not met with in Ireland.

Generally speaking, its habitat is damp meadows and marshes, but these are by no means essential to its well-being, as it may be found in great abundance on dry pasture land and moors.

The food of this rodent consists of clover, grass roots, grass seeds, corn, and almost any and every green substance that may come in its way. It excavates tunnels or runs in the ground, and in these it stores large numbers of acorns, beech mast, and other forms of wild fruit for consumption when it awakes from its winter slumbers.

By some authorities it is said to breed three or four times a year, and as many as six by others, but it is, of course, difficult to disprove or corroborate statements of this character concerning animals in a wild state, and what they do in confinement cannot be admitted as convincing evidence. From four to six young ones form a usual litter. They are generally found in cosy nests built of fine dry grass blades in some slight

FIELD VOLE'S NEST.

hollow in the ground, but whether any are ever born underground I am not prepared to say. I have certainly found families in subterranean nests, but in all such cases they were able to run about, and had probably gone to earth for purposes of safety.

In favourable circumstances, such as are afforded by a succession of mild, open winters and the comparative absence of their natural enemies in the shape of buzzards, owls, kestrels, stoats, and weasels, these rodents will sometimes increase in numbers at an alarming rate. Many instances are upon record of their having assumed the proportions of a serious plague not only on the Continent, but during quite recent times both in England and Scotland. During the autumn of 1856 an area of about twelve thousand acres of land was devastated by these creatures in one part of Germany, and a few years later upwards of four hundred thousand were slain in another district in a few weeks.

Field Voles, although graminivorous, will sometimes eat each other during a scarcity of their natural food.

I have noticed in Scotland that the young of both the long- and short-eared owls appear to be fed almost entirely upon these creatures.

This animal is sometimes confused with the Bank Vole, but the two species may readily be distinguished if it is remembered that the latter is chestnut-coloured instead of greyish brown on its upper parts.

Ring Ouzels at Home.

"The Ring Ouzel builds a nest somewhat similar to that of the blackbird."

THE RING OUZEL

THIS handsome migrant, in which Gilbert White took so much interest, arrives upon our shores in April, and straightway repairs to its favourite breeding haunts in the most wild and solitary parts of the West and North of England, Wales, Scotland, and Ireland. In other parts of the country it is, as a rule, only seen during its spring and autumn migrations. I have never observed it in either the Shetlands or the Outer Hebrides.

Curiously enough, although it may frequently be seen on the Surrey hills close to London whilst on its journey north in the spring, I have never once met with it in those parts upon its return in a southerly direction.

The Ring Ouzel builds a nest somewhat similar to that of the blackbird. It is generally placed under a ledge or in a sheltered crevice in the face of a little broken bit of cliff, or amongst heather growing on a steep bank. I have several times found it in a hole formed by a stone having fallen out of an old dry wall, twice in rushes, once in a holly bush, and once in furze.

The eggs, numbering four or five, bear a considerable resemblance to those of the blackbird, but are, as a rule, marked by larger and better defined spots. This is not, however, an infallible distinction, for the eggs of both species vary considerably in this respect.

The song of the Ring Ouzel, like that of the missel thrush, consists of a few plaintive, oft-repeated notes, singularly in harmony with the solitary character of the savage wastes in which the bird lives. It is generally delivered from the top of some prominent boulder of rock, within sound of the melancholy wail of the golden plover, or the piping call of the curlew.

YOUNG RING OUZEL.

The alarm note is a loud, harsh cry sounding like *tac-tac-tac,* which is generally uttered whenever the bird is disturbed, and most vehemently and persistently if the young ones should be considered in danger.

Both parent birds are very bold in defence of their offspring, and on several occasions I have witnessed a pair courageously drive a kestrel away from the neighbourhood of their nest containing chicks.

During the spring and summer the food of the Ring Ouzel consists of worms, grubs, and other forms of insect life, but throughout the autumn wild fruits of various kinds are eagerly devoured, and none more so than the berries of the rowan or mountain ash.

The colour of the male is dull black, each feather being margined with grey. The chest is marked with a broad crescent of pure white. The female is browner and greyer in colour, and her curved band of white on the chest is duller and less defined.

Young birds of both sexes lack the white crescent in their first coat of feathers, the breast being spotted and mottled as shown in our illustration.

THE STOAT.

"This destructive little animal is common throughout the British Isles."

"Hares, rabbits, rats, voles, birds, and eggs form the food of the Stoat."

THE STOAT

THIS destructive little animal is common throughout the British Isles, and lives amongst rocks, old dry stone walls, disused quarries, in woods, on furze-clad commons, or wherever there is food and shelter to be obtained.

It is reddish brown on its upper parts, and yellowish white beneath, with exception of the tip of its tail, which is black, and remains so throughout all seasonal changes, and in all latitudes. In the more elevated parts of Scotland the Stoat regularly assumes a yellowish white winter dress, just as it does in the more northern parts of Europe, Asia, and America, but in the Lowlands and the north of England it is by no means consistent in this respect, although white specimens are frequently met with, and especially so during hard winters. In the south of England I have never seen a white Stoat at all. It is said that white specimens are met with at all seasons on some of the highest Scottish mountain-tops, and I can believe this because I have on several occasions seen blue hares still wearing their white coats at midsummer.

From five to eight young ones are brought forth at a litter during the spring, and wander about with their parents all the summer, learning the arts and mysteries of the chase.

Hares, rabbits, rats, voles, birds, and eggs form the food of the Stoat. In pursuit of the last I have watched the animal climb trees and bushes with the confidence and agility of a squirrel.

It appears to exercise a peculiar

STOAT AT A DRINKING PLACE.

influence over individual hares and rabbits, for sometimes when they are pursued by their bloodthirsty foe, instead of running straight away, and thus escaping, they career round and round in aimless circles, and with terrified screams collapse as if paralysed and wait in helpless fear until pounced upon by their relentless pursuer. This does not always happen, however, for I have seen a rabbit chased from its burrow outstrip its enemy, and by a straight run make good its escape. Neither do they always give in without a struggle when seized. On one occasion, whilst crossing a field on my way to visit some friends, I noticed a rabbit tumbling head over heels in front of a burrow, and imagined that it must be caught in a snare. Closer inspection, however, revealed the fact that it had been seized by a Stoat. Running a hundred yards or so to my friend's house I secured a gun and a couple of cartridges. Upon returning to the scene of action I observed the back of the Stoat in a declivity at the mouth of the rabbit's hole. It was working convulsively as if the animal were mending its grip upon the victim. Raising the gun I fired, and ran up to behold a sight that almost made me doubt the evidence of my senses. The Stoat was firmly held by the fore-quarters in a steel trap, and the rabbit had vanished!

Stoats hunt more by sight than scent when pursuing quarry in open country.

Wonderful stories are told of Stoat packs attacking human beings. I have only encountered one pack consisting of six or seven young ones and their parents, and although the latter gave voice to angry threats, I stood my ground with a stout walking-stick, and they did not venture nearer than within three or four yards.

Capercaillie on Nest.

"The nest of the Capercaillie is sometimes made beneath the loppings of felled trees."

THE CAPERCAILLIE

THIS is by far the largest member of the Grouse family found in Britain. Its name is of Gaelic origin, and may be spelt in several different ways without seriously outraging the laws of orthography. Some authorities favour Capercaillie, whilst others, with apparently equal justice, write it Capercailzie or Capercally.

In olden times it flourished in the immense forests that grew in the north of England, Scotland, and Ireland, but as the trees were destroyed from one cause or another it dwindled away in numbers until it became quite extinct, even in Scotland, its last stronghold, towards the end of the eighteenth century. In 1837 it was reintroduced from Scandinavia, and although it has refused to establish itself, owing, no doubt, to the lack of satisfactory natural conditions south of the Tweed, it has thriven and spread with astonishing success north of the Border.

The male is very much larger and heavier than the female. He may be said to approximate a turkey in size and coloration, whilst she has more the appearance of a glorified edition of the grey-hen. Considering the immense size of the male, which sometimes attains to a weight of ten pounds in Scotland, and frequently half as much again on the Continent, his powers of flight are astonishing. I have on more than one occasion been surprised at the extreme swiftness with which the bird can escape through the trees after being flushed from the ground.

During the pairing season the old males select some favourite spot in the forest, and, taking up their station on a pine tree about dawn, commence to attract the females. This is said to be a somewhat grotesque procedure by those who have enjoyed the good fortune to witness it. With outstretched neck, wings adroop, tail spread out fanwise, and the plumage of the body ruffled as if in anger, the bird begins to call, and

CAPERCAILLIE'S NEST.

continues until he works himself up into an agony of passion. The "play," as this kind of love-making is called on the Continent, ceases at sunrise, but is indulged in again after sundown.

The nest of the Capercaillie consists of a slight hollow lined with pine needles, bits of dead grass or leaves. It is frequently situated at the foot of a tree, and by preference one with such a bend in the trunk as will afford the sitting bird shelter from descending rain-drops. It is sometimes situated among tall bilberries, which provide excellent cover, or made beneath the loppings of felled trees, as in the case of the bird figured in our plate.

The eggs number from six to eight as a rule, but occasionally as many as twelve or even fourteen have been found. They are of a pale reddish yellow colour, spotted all over with dark orange brown markings.

If a female brooding her small chicks is disturbed, she flutters round feigning injury, whilst her downlings scatter in all directions and hide.

The Capercaillie, although such a large bird, appears to be peculiarly liable in the nesting season to the attacks of foxes, crows, and other kinds of vermin, and a Highland keeper informed me on one occasion that numbers of young ones die a natural death when nearly full grown.

Young Missel Thrushes.

"The Missel Thrush grows bold in the protection of its young."

THE MISSEL THRUSH

THIS bird is common nearly all over the British Islands, where trees of any size grow in hedges, parks, woods, and orchards. During the last century it has greatly extended its area of occupation, both in a westerly and northerly direction. In Ireland it was not known until 1808, but now breeds even in Achill, and in Scotland it has gradually spread, and may be met with in Caithness and Sutherland, although I have never seen it in either the Shetlands or Outer Hebrides.

The Missel Thrush may easily be distinguished from its congener, the Song Thrush, by its larger size, lighter colour, and the fact that it shows a piece of white on either side of its outspread tail, when flying away from the observer.

Its harsh alarm notes sound like the noise made by a toy watchman's rattle.

In December, January, and February, the Storm Cock—as this bird is frequently called—may be heard singing whilst swaying to and fro on the topmost branch of some windswept tree. The song, although a wild, defiant strain, in keeping with the riotous condition of the elements during the season when it attracts most attention, is not very melodious, and far inferior to even the weakest efforts of the blackbird.

The Missel Thrush commences to build in March, and, in mild winters, sometimes as early as February. The nest is composed of small twigs, dead grass stems, mud, moss, and wool, with an inner lining of soft dead grass blades. It is placed in the fork of a tree, or upon a large horizontal branch, at varying heights from the ground. I have found it on a stump only three feet in height, and sometimes in a tall ash forty feet above the ground, but never in a bush or amongst rocks.

The eggs, numbering four or five, are of a greyish green ground colour, with

underlying markings of grey, and spots and blotches of reddish brown. Some-

MISSEL THRUSH'S NEST.

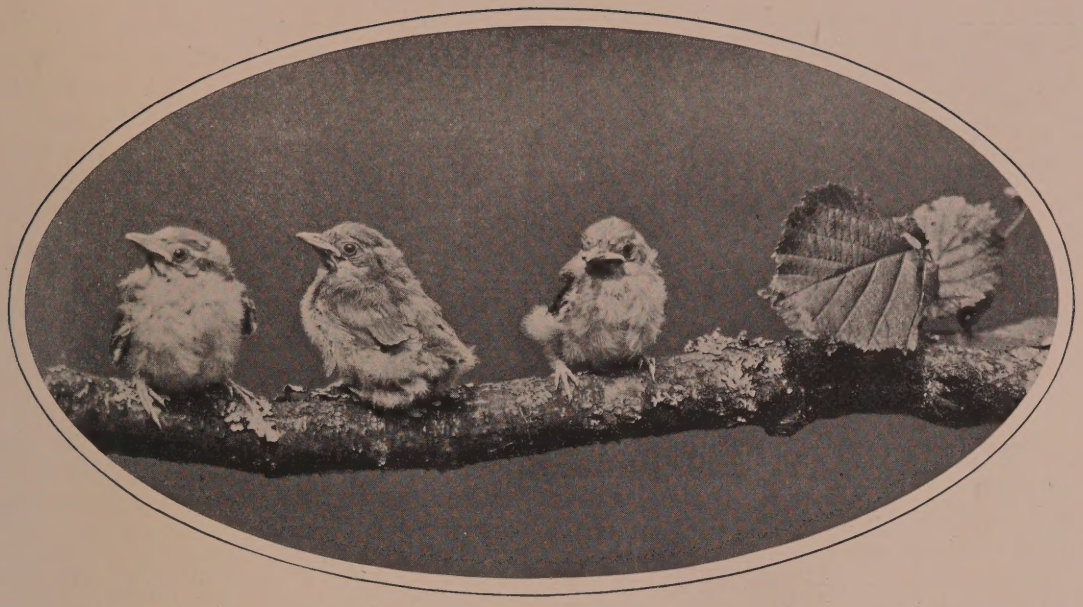
times clutches are met with of a reddish grey ground tint marked with brownish red.

Although shy during the greater part of the year, the Missel Thrush grows bold in the gratification of its appetite, or the protection of its young. I have seen members of this species chasing carrion crows, rooks, and jays away from the locality of their nests. It will courageously attack even the stealthy sparrow hawk, and has been known to perish in an unequal combat with a stoat bent on destroying its fledglings.

The food of this species consists of snails, slugs, worms, and such wild berries as can be procured in season.

Unlike the young of the Song Thrush, the members of a family of Missel Thrushes remain together for the greater part of the summer, but appear to break up before the rowan berries are ripe. On one side of my garden an old rowan tree grows, and when the fruit upon it is ripe it is visited all day long by Missel Thrushes. The birds are very intolerant, not only of members of their own kind, but of starlings, blackbirds, and even sparrows alighting on the tree, and with angry harsh notes spend a great deal of their time driving intruders away.

Garden Warbler on Nest.



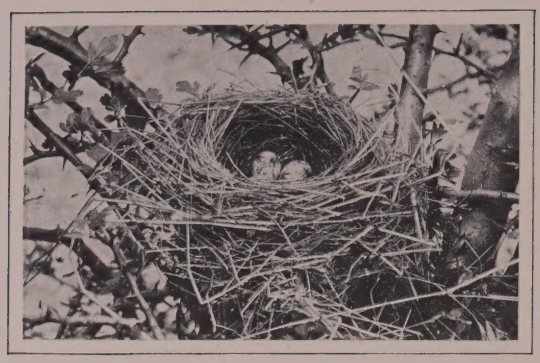
"Their fledglings made good 'sitters.'"

THE GARDEN WARBLER

THE Garden Warbler is one of our most welcome summer visitors, for although it is of shy, retiring habits, and not much seen, even by people living near where it breeds, it makes its pleasant voice heard a great deal. Arriving at the end of April and beginning of May, it departs again in September and October. As a vocalist the male ranks next to the Blackcap Warbler. His song is softer and shorter than that of his relative, and lacks something of its wild dash and irregularity, but in spite of these differences many people are unable to distinguish it from that of the Blackcap. I must confess that this is not an easy matter, and that the singer does not help the listener much in the direction of correct identification, for although he is constantly shifting about in his leafy bower, he does not often make his appearance in the open. If, however, a view of him should be obtained, it will be noted that he is about six inches in length, and is light brown, tinged with olive on his upper parts, and brownish white beneath, the darkest tints of the latter being visible on his throat, chest, and sides. These simple facts will establish the identity of the feathered vocalist, and prevent confusion with either the Blackcap or the greater or lesser whitethroats.

The male Garden Warbler sings all through the laborious period of chick rearing, and I have known him persist in it whilst he was aware of his mate enduring the greatest distress caused by the proximity of a brown owl to her nest containing young. Cock robins are sometimes guilty of the same kind of apparently hard-hearted behaviour.

This species breeds in nearly all suitable parts of England, and is commoner in Wales, the south of Scotland, and Ireland than it was supposed to be only



GARDEN WARBLER'S NEST.

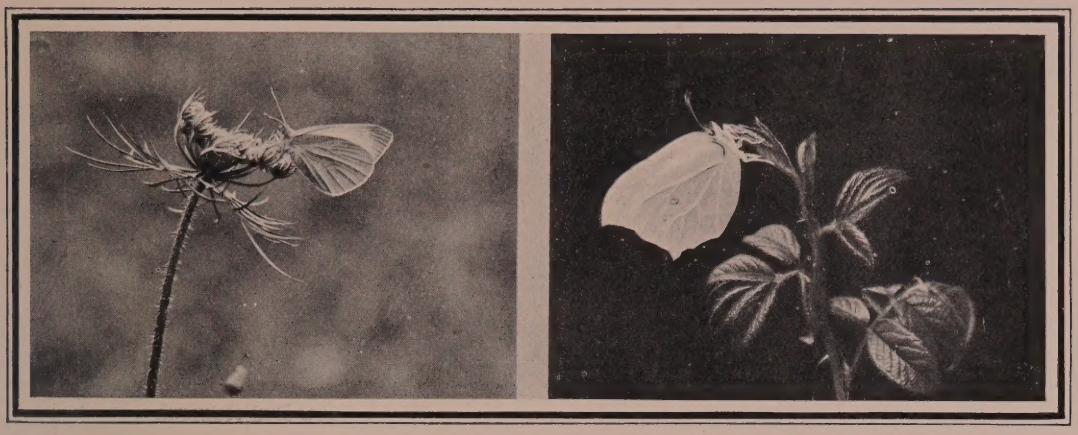
a few years ago. It breeds in woods, clumps of trees, and bushes growing beside streams, thick hedges, orchards, and shrubberies. During June, 1910, I found three pairs breeding close to each other in a sheltered little ghyll amongst the Westmorland Fells. The cover consisted of ash, elm, birch, and other trees, with scattered clumps of thorn and brier bushes, and plenty of sunlit spaces between. I tried hard, but in vain, to photograph two of the females on the nest. They were inordinately shy, even after the young ones had been hatched, but their fledglings made good "sitters."

The nest is made of straws, blades of grass, and fibrous roots, with an inner lining of horse hair. It is placed in a thorn, brier, bramble, or other bush, but may sometimes be found amongst ivy or nettles.

The eggs number from four to six, five being a usual clutch according to my experience. The ground colour varies from white to greenish white or yellow stone grey, blotched, spotted and clouded with brown of various shades. They are frequently indistinguishable from those of the Blackcap Warbler.

THE SMALL TORTOISESHELL BUTTERFLY.

"It appears to be very partial to the nectar furnished by the blossoms of the lilac."



The Small Cabbage White Butterfly. The Brimstone Butterfly.

BUTTERFLIES

THE diurnal habits, exquisite beauty, and fascinatingly strange life history of butterflies in their evolution from the tiny egg to the perfect imago appeal with irresistible charm to all lovers of the country-side.

One of the earliest to make its appearance in the spring is the handsome Small Tortoiseshell. It hibernates during the winter months in old sheds, barns, and disused rabbit-burrows, from which retreats a fine sunny day will easily tempt it forth even in February. It appears to be very partial to the nectar furnished by the blossom of the lilac.

The Brimstone Butterfly is a hardy creature, gifted with a strong, buoyant flight. It is very common in woods in the south of England, and appears early in the spring. I have frequently been interested in noting how wonderfully the male, which is yellower than the female, harmonises at a little distance with a primrose when resting upon it. Many members of this species hibernate, and I have found specimens at Christmas clinging to the undersides of bramble leaves.

Large and small White Butterflies are exceedingly common on the Surrey hills, where it is not an unusual thing during a hot summer's day to see ten or a dozen of one species or the other mounting the air in an excited cluster, clattering together and battling in the air over some momentous question in the welfare of their giddy world as they rise higher and higher.

I have several large clumps of variegated grass growing in my garden, and notice that members of both these species are very fond of roosting in it. Whether they are conscious of any harmonising effect or not it is impossible to say, but it is certain that they are very difficult to detect when resting amongst the broad blades.

Ringlets and Meadow Browns are so abundant during July and August in some parts of the country that they rise from the grass on the edges of woods and in meadows almost at every other step, and upon occasion several members of the latter species may be seen clinging at the same

The Ringlet.

The Red Admiral.

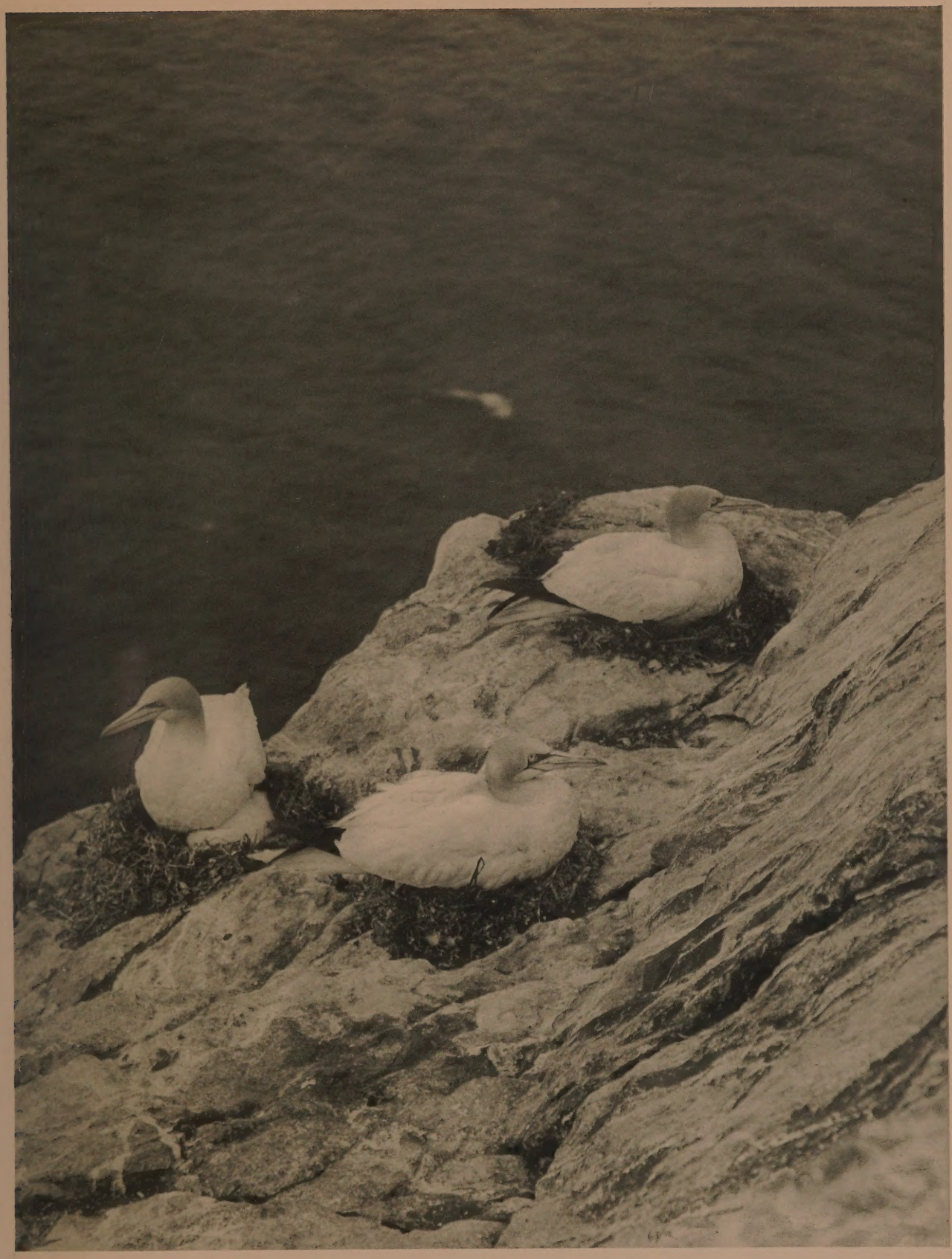
time to different parts of a single plant.

The Red Admiral is one of our boldest and most gorgeously coloured butterflies, and its curious habit of gliding through the air on outstretched motionless wings during a hot September afternoon is an interesting sight to the entomologist. It is very fond of overripe fruit, and especially plums which have been pecked by birds.

The Common Blue Butterfly is exceedingly numerous on chalk hills, and has a peculiar habit of going to roost upside down. It always alights on a grass stem or other plant head upwards, and then deliberately reverses its position before going to rest.

The Large Blue.

The Meadow Brown.



Gannets.

"Gannets breed in colonies of a few hundreds to tens of thousands strong."

THE GANNET, OR SOLAN GOOSE

REPEATED visits to the Bass Rock, Ailsa Craig, and the Outer Hebrides, in addition to summer holidays spent at St. Kilda, in the Shetlands, and upon the North Sea, have given me many opportunities of studying the life and habits of this interesting species.

Gannets breed in colonies of a few hundreds to tens of thousands strong. One well-known authority has expressed the opinion that not fewer than two hundred thousand breed on the cliffs of St. Kilda and the adjoining islands and rock-stacks alone. Whilst these figures appear to me an exaggeration, I must frankly confess that after watching for days on end the vast numbers of birds wheeling in the air, and sitting in majestic solemnity on the towering cliffs, I left the place incapable of hazarding any estimate of their numbers.

During February, March, and April Solan Geese congregate at their favourite breeding haunts, and occupy every ledge and corner of the lofty cliffs capable of accommodating a nest. The structure consists of dead seaweed, lined with bits of turf, moss, and grass, and individual birds may frequently be seen adding materials to it even when it is occupied by a down-clad young one. Like rooks, Gannets are frequently guilty of stealing materials from each other's nests, and when a thief is caught in the act a fierce battle generally ensues. These bitterly waged fights sometimes end in bloodshed, and explain why Solan Geese are occasionally seen with the sight of one eye destroyed.

In May or June one egg is laid, of a

bluish white colour, covered with a thick coat of lime, which soon becomes soiled

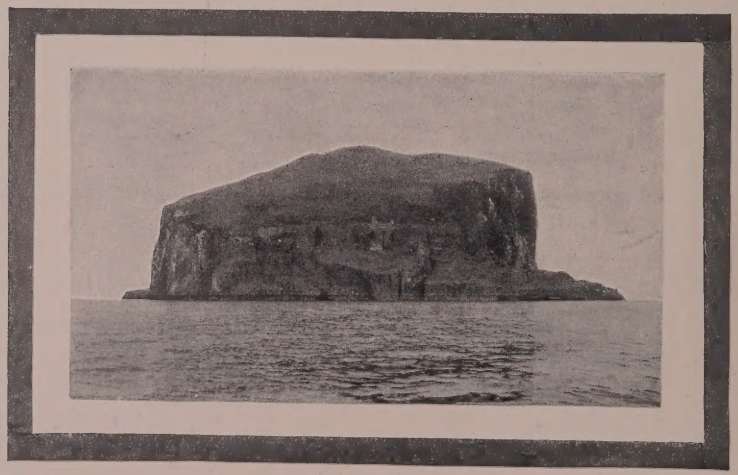
THE GANNET.

to a dirty brown tint by contact with the sitting bird's feet.

Although Gannets are by no means shy birds in their breeding haunts, curiously enough those resorting to the Bass Rock always appear to me to be bolder than the members of any other colony I have visited. On several occasions I have had my legs vigorously pecked whilst walking about amongst sitting birds breeding on the historic rock.

The Gannet's method of catching its prey is distinctly curious. Sailing along upon outstretched wings, at a height of from two to three hundred feet above the sea, it keeps a diligent look-out for any surface-swimming fish, such as a herring, sprat, or pilchard, below, and directly one is espied the bird turns sharply in its course, half closes its wings and descends like an arrow. Striking the water it disappears, leaving a patch of foam on the surface, and, as a rule, is gone from view between eight and twelve seconds, when it shoots to the surface again with such buoyant alacrity as to suggest that it has been released from a spring.

Great numbers of young Solan Geese are captured in August at St. Kilda, and cured for winter consumption. In former days Lowland farmers bought birds taken at the Bass Rock for the same purpose. A piece of roast Gannet was supposed to be a great appetiser, but a farmer attending a public dinner on one occasion avowed his disbelief in it, saying that he had eaten a whole goose before leaving home, and did not feel a bit the more hungry for it.



Whinchats with Food for Young.

"The nest is made at the foot of a small furze-bush, in deep heather, or in long, tangled grass."

THE WHINCHAT

THE Whinchat, although it cannot be justly called a plentiful summer visitor, is, nevertheless, well distributed over England, Wales, and Scotland. In Ireland it is rarer and more local.

Whilst furze-clad commons and heath-covered wastes are its favourite haunts they are by no means essential to the bird's well-being, for it may often be found inhabiting meadow-fields and railway cuttings in cultivated districts.

Its habits may not inaptly be described as a mixture of those of the Stonechat and spotted flycatcher. Like the former, it is very partial to the vantage ground afforded by a tall furze-bush, thistle, or other eminence, from which it may frequently be seen to flutter into the air in pursuit of a passing fly or moth, after the manner of the latter named species.

The male Whinchat is much more boldly marked than the female, as will be seen by a cursory glance at our photogravure plate, and although he may frequently be found inhabiting the same ground as the Stonechat, the well-marked differences in the plumage of the two species is calculated to prevent any kind of confusion. His song, which is low, sweet and agreeable, is sometimes delivered on the wing, but more often from the topmost spray of a bush. The call-note sounds very like the word "*u-tick*," and may easily be mistaken for that of the Stonechat.

The nest is made at the foot of a small furze-bush, in deep heather, or in long, tangled grass, and is composed of dead grass and moss, with an inner lining of horse-hair. It is very difficult to find, and the majority of those

I have seen have been discovered either by accident or by watching one or

MALE WHINCHAT.

other of the parent birds through field-glasses.

The eggs, numbering from four to six, are of a beautiful greenish-blue colour, sparingly spotted and speckled round the larger end with pale reddish-brown. In some specimens the markings are altogether absent. They may be distinguished from the eggs of the Stonechat by the fact that they are of a deeper blue colour and less richly and clearly marked.

The Whinchat breeds during May and June, and the male is not only very assiduous in helping to feed the chicks and keep the nest clean, but feeds his mate during the time she is engaged in the task of nidification. If anything calculated to arouse his suspicion should happen to be near the nest upon his return with food, he will linger round for a time, angrily uttering his call-note, and, finally growing weary of the presence of the intruder, may be observed to gulp down the insects he has brought and fly away in search of more.

This species is migratory, arriving in April and May and leaving again during September and October.

Male Blackbird with Food for Young.

" The nest is composed of small twigs, rootlets, dry grass or moss intermixed with mud."

THE BLACKBIRD

THERE is no need to enter into any kind of description of this well-known bird, which is common practically all over the British Islands and beloved of most people, saving the gardener, from whose fruit trees it takes well-earned toll, and the poacher, of whose unwelcome presence it frequently warns the gamekeeper.

The male is a much-appreciated vocalist, and although his song does not contain any great variety of notes, such as he possesses are rich and flute-like. They are delivered in a leisurely, stately manner, and I cannot understand why they should be mistaken, as they sometimes are, for those of the song thrush, which are not so mellow and generally poured out in a vehement flood. It has been said that the Blackbird sometimes imitates the notes of other feathered vocalists, but I have never noticed this peculiarity half so much as in the case of the song thrush.

The male Black Ouzel—as the bird is, to my mind, better named in some parts of the country—is *par excellence* the detective of the woods, and if a cat, stoat, weasel, owl, or human poacher happens to be on the prowl he may always be trusted to find out and sound the alarm in his clear ringing " *spink, spink, spink* " notes.

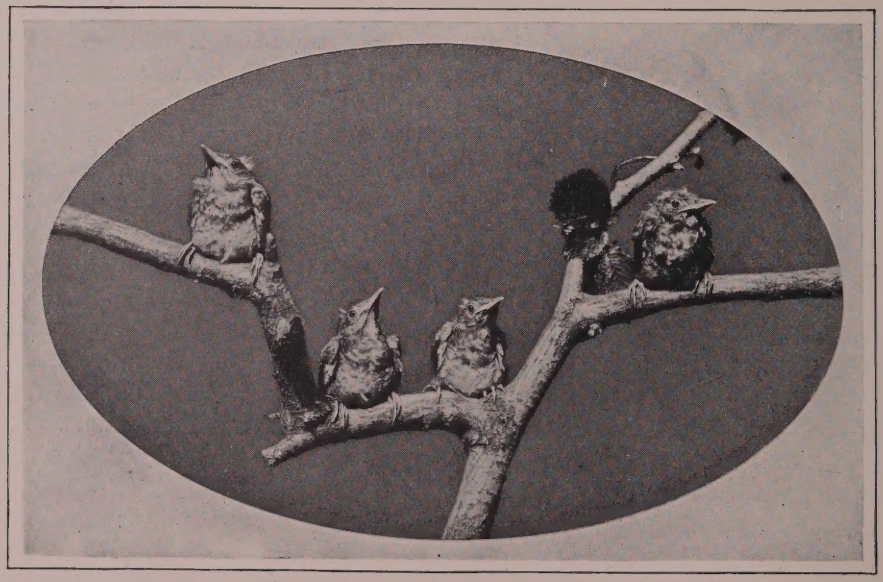
This species breeds practically all over the British Islands, even to the outermost of the Hebridean group where I have heard the cock singing from the top of a chimney within sight and sound of Atlantic breakers. The breeding season commences in March and goes on until July, and even August, during which time three or four broods may be reared by the same pair of birds.

BLACKBIRD'S NEST IN AN OLD PAIL.

The nest is built in hedges, bushes, trees, outbuildings, under sheltering banks, on ledges of rock, in holes, in old stone walls, and occasionally on the ground amongst tall grass. During the spring of 1910 I either found or had shown to me Blackbirds' nests in the following odd situations: inside an old zinc pail thrown on to the top of a recently trimmed hedge, as shown in the accompanying illustration; in a hole in a stone wall, where a redstart might have been expected to breed; on the spring of an old railway engine tender, standing in a siding; inside an old tin can which I purposely placed amongst a few tender twigs sprouting from the trunk of a large oak.

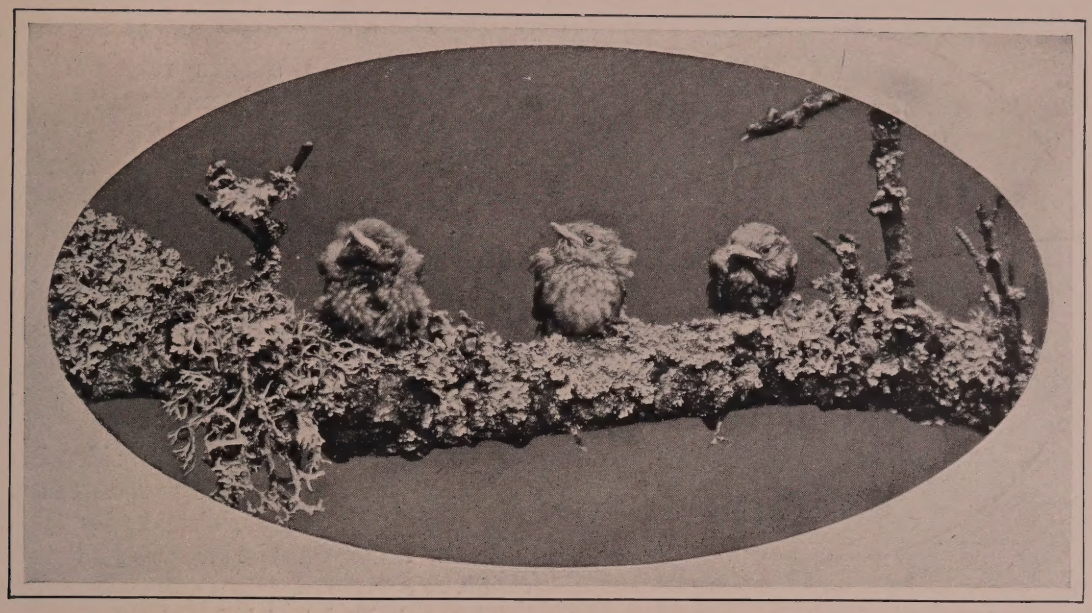
The structure is composed of small twigs, rootlets, dry grass or moss intermixed with mud and lined with fine dead grass. As a rule, it is deeper than the nest of the ring ouzel.

The eggs number from four to six, although seven and even eight have upon rare occasions been found. They are dull bluish-green in ground colour, spotted, blotched, and sometimes streaked with reddish-brown and grey. Like those of the ring ouzel they are subject to variation, not only in ground colour, but in the size and density of the markings.



MALE REDSTART.

"Engaged in feeding his young ones."



"Young 'Firetails' bear a striking resemblance to fledgeling redbreasts."

THE REDSTART

THE Redstart, or Firetail, as it is frequently called in the north of England, is a summer visitor to our woods and dells, arriving in April and departing again in August or September. It is sparingly distributed over most of the suitable parts of England, Wales, and Scotland, but somewhat rare in Ireland. I have met with it breeding near farmhouses in Essex and Norfolk, and in lonely Highland forests, but nowhere so numerously as amongst the fells separating Yorkshire from Westmorland, where every little clump of trees appears to hold its pair of birds.

The bright, rusty-red colour of the tail of the male and his habit of constantly shaking it render him easy of identification, but alas! not of photography. The individual figured in our coloured plate was engaged in feeding his young ones in a deep, dark wood, where it was impossible to take snapshots, and I am afraid to say how many plates I exposed upon him before I succeeded in rendering his caudal appendage anything more definite than a misty blur. The female is not as brightly coloured as her mate. She lacks the black and white on her head, and her tail quills are of a more sober hue.

The male Redstart is a strenuous vocalist, commencing very early in the morning and continuing until late at night. His refrain is short but sweet, and to my ear bears a considerable resemblance to that of the pied fly-catcher. The call note is very distinctive, and sounds something like the words *wee-tit-tit*.

This species builds in holes in old moss-clad stone walls, in decaying tree trunks, and in crevices and fissures in the rock. I once found a nest in the thatch of a hayrick, and have several

FEMALE REDSTART.

times discovered it in holes in the ground amongst stones overgrown by vegetation. The structure is composed of dead grass, rootlets, moss, and leaves, with an inner lining of feathers, down, and hair. I have known a pair of birds of this species return to a favourite breeding haunt year after year with unbroken succession.

The eggs number from four to six, although seven and even eight may occasionally be found. They are of a pale bluish green colour, somewhat lighter than those of the hedge sparrow. They are laid during May and June, as a rule, although clutches may sometimes be found as late as the beginning of July.

Young Firetails bear a considerable resemblance to fledgeling redbreasts, but may be distinguished by the reddish tinge on the rump and tail quills.

The male Redstart helps the female to feed the chicks upon caterpillars, small beetles, moths, and flies, and is loud in his protestations if an owl or prowling cat should happen to appear near the nesting hole.

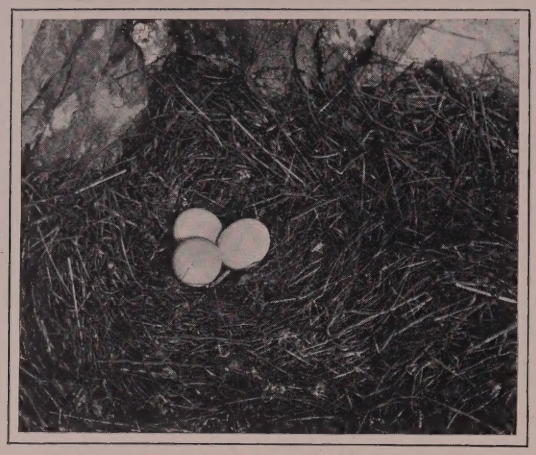
Young Brown Owl.

"A most ludicrous expression of simple innocence upon its cat-like countenance."

THE TAWNY OWL

THE Tawny, Wood, or Brown Owl, as it is variously called, is fairly common in most well-wooded parts of England, Wales and Scotland, especially where old trees abound, and game preserving is not carried on too zealously. Curiously enough it is not met with in Ireland. Being a nocturnal species, in possession of a strong, distinctive voice, which it frequently uses very liberally, it is much oftener heard than seen. It is partial to ivy-clad ruins, deep dark woods abounding in hollow trees, and districts where old and little frequented stone barns, away from human habitations, afford it diurnal peace and shelter. I have nowhere met with it so numerously as in parts of Cumberland and Westmorland. Although it may sometimes be found breeding in clumps of old timber growing almost in the centre of small provincial towns, it does not make use of farm-yards and buildings surrounding them to the same extent as its congener the Screech Owl.

The Tawny Owl appears to be most active in pursuit of its prey at dusk of evening and before dawn in the morning, but may be seen on the wing and heard uttering its characteristic call-notes throughout all hours of the night. I have watched it hunting for food during a winter afternoon, and heard it hoot in broad light of day, both in England and Scotland, but these are, of course, exceptional instances. During the daytime it may frequently be seen sitting on the branch of a tree, close to the trunk, in the darkest and densest part of a wood, with its eyes closed or only partly open and a most ludicrous expression of simple innocence upon its cat-like countenance. When discovered sleep-



EGGS OF THE TAWNY OWL.

ing in such a situation by a vigilant blackbird, the alarm is promptly given, and the owl is mobbed by all the small birds in the neighbourhood, whose shrill voices may be heard at a considerable distance, engaged in an angry chorus of protest.

This species feeds upon voles, mice, rats, young rabbits, birds, frogs, and, occasionally, fish. The undigested parts, such as bones, fur and feathers, are ejected in the form of lengthened pellets, in the same way that cherry stones are returned by the mouth in the case of blackbirds and thrushes.

If an adequate supply of mammalian food can be secured, the owl under notice is a comparatively harmless creature, but if it cannot, heavy toll is taken, especially of the young of blackbirds, thrushes, and other feathered denizens of the woods.

The eggs of this species are laid on decayed wood in hollow trees, on old hay in barns, and not infrequently in the disused nests of crows, rooks, magpies, hawks, and even wood-pigeons. They number three or four, are pure white, and laid during April or May, although clutches may sometimes be found later.

After the young ones have fledged they sit about in the shady parts of trees, and are fed by their parents even when they can fly well and appear capable of obtaining prey for themselves.

Sand Lizard.

"The Blind-Worm or Slow-Worm . . . is in reality a legless lizard."

THE SAND LIZARD, THE COMMON LIZARD, AND THE SLOW-WORM

THE Sand Lizard is a beautiful reptile found almost exclusively, so far as our country is concerned, in the west of England. I have, however, met with it on a sandy heath dividing Surrey from Hampshire. It is an exceedingly shy and wild creature, taking alarm at the slightest sign of danger and hastily retreating to any form of cover that may afford concealment. In length it measures from seven to nine or ten inches, more than half of which is accounted for by its abnormal tail.

It varies to a considerable extent in coloration and markings. The specimen figured in our plate was sandy brown on the back, marked by broad zig-zag bands of rich velvety brown, bordered by two longitudinal lines of pale straw colour. Between these lines along the whole length of the back a number of yellowish white dots were distributed. The sides were tinged with green, which deepened in hue towards the under parts. The female lays eggs which are deposited in the sand, covered over, and left to be hatched out by the heat of the sun.

The Common Lizard differs in many respects from the species described above. It is smaller, measuring only five or six inches in length, much commoner, being found in many parts of Great Britain and even in Ireland, and brings forth its young fully formed and quite capable of running about and taking care of themselves.

Like its more beautiful, but less known relative, the Sand Lizard, this species is fond of sunning itself on banks, and may be met with from the early spring until late autumn during warm sunny days.

Its tail is very brittle and is liable to

A TAILLESS FEMALE COMMON LIZARD.

break off if only a slight amount of violence be used in capturing the creature as it scuttles through the grass or heather to its retreat. It is capable, however, of growing it again, but the process appears to be a very slow one judging from the rate of progress made in the case of a member of this species which, at the time of writing this article, I am keeping under observation inside a forcing frame in my garden.

The gravid female figured in our illustration had lost her caudal appendage when I found her on a Surrey common, and at a distance of a few feet it was difficult to distinguish one end of her from the other. She was very savage and hung on to my finger as a ferret would cling to a rat.

The Blind-worm or Slow-worm, which enjoys two of the most inaccurate popular names ever given to any creature, although much like a snake in appearance, is in reality a legless lizard in possession of what true snakes lack, viz. : eyelids which it can close at will. I am always sorry when I see people with a prejudice gained from the first chapters of Genesis, or an instinctive aversion handed down from their forefathers who dwelt in caves, slaying this inoffensive and useful creature with savage ferocity. It measures from ten to fourteen or fifteen inches in length, is covered with small scales and casts its skin like a snake. The Slow-worm feeds upon slugs and worms.

Eider Duck on Nest.

"Her subdued coloration is eminently useful to her whilst she is engaged in the dangerous work of incubation."

THE EIDER DUCK

THIS is a purely maritime species, and I have never seen it more than a few miles from the open sea, and then it was nesting on a number of small islands situated in a large salt-water loch. Although it is sometimes seen in the English Channel, and is common in the North Sea, it does not breed anywhere south of the Farnes, with the exception of Coquet Island near Warkworth, where I understand it has recently re-established itself. Round the Scottish coast, and in the Orkneys and Shetlands, it nests in all suitable localities, but is not met with in Ireland. This is strange, considering the fact that it is quite numerous on the Island of Islay which is not twenty miles away as the crow flies.

The males and females differ very radically in appearance, for whilst the former in his wedding garments is a conspicuous picture of black and white, the latter is clad in a sober coat of pale reddish brown feathers, variegated with tints of a darker hue. Thus her subdued coloration is eminently useful to her whilst she is engaged in the dangerous work of incubation amongst heather rocks and on dead seaweed.

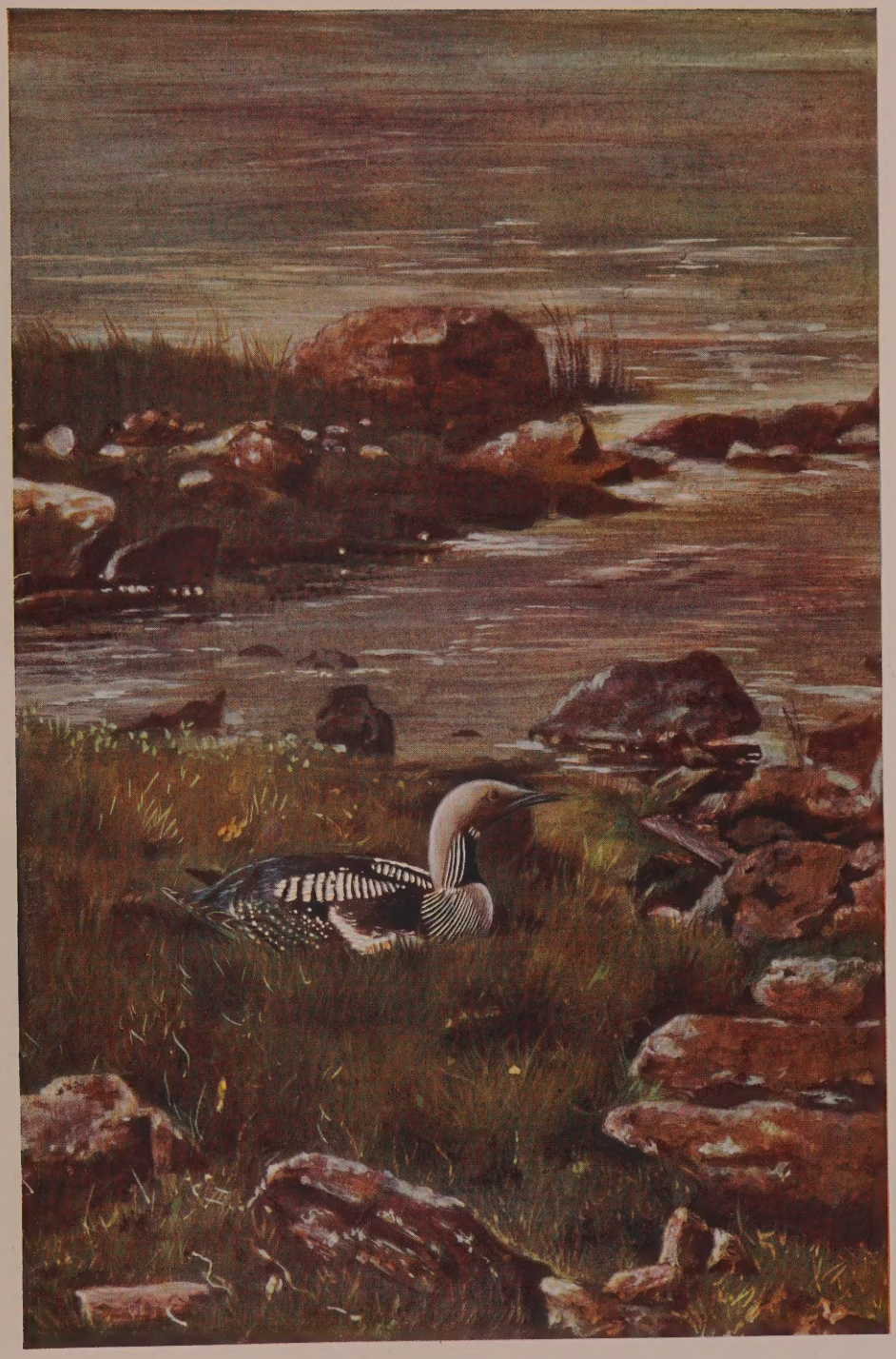
As some indication of the effects of protection upon the habits of a wild bird, it may be mentioned that there is a greater difference in the behaviour of an Eider Duck breeding on the Farne Islands and one nesting in the Shetlands, than there is between a wood-pigeon

EIDER DUCK'S NEST.

reared in a London park and one bred in a Hampshire wood. At the Farne Islands I have on several occasions stroked Eider Ducks on the back whilst they sat stolidly covering their eggs, and, so far as I could see, without in the least disturbing their equanimity. At places where they do not enjoy protection, however, I have tried in vain to get near enough to take a photograph.

This species feeds by day upon shell-fish, small crustaceans, crabs, and marine insects, which are dived after with great celerity and ease. Whilst sitting upon high rocks overlooking a translucent sea, I have observed Eiders making use of their wings when under water in a way that suggested a modified form of flight.

The nest consists of dry seaweed, sprigs of heather and bits of dead grass, with an inner lining of down plucked from the bird's own body. This increases in quantity as laying proceeds, and is used to cover the eggs whenever the duck leaves them of her own accord. The eggs number from four to eight, and are of a pale greyish green colour. When the females commence to sit, the males leave them, and may be seen swimming in companies in the vicinity of the breeding ground. The young ones, if compelled to take to the open sea in rough weather, swim in a bunch close behind their mother, in order to enjoy the shelter of her body.



THE BLACK-THROATED DIVER.

"Is one of the shyest and wariest wild creatures."

"This species breeds on lochs in the extreme north and north-west of Scotland."

THE BLACK-THROATED DIVER

DARK-WATERED, solitary lochs, framed in sombre banks of peat, are the summer haunts of this fascinating bird. On land the Black-Throated Diver is the very embodiment of helpless awkwardness, but in the water it is a veritable wonder of grace, skill, and power. It has been said that it can remain submerged for nearly two minutes on end, and swim for a quarter of a mile without putting the tip of its bill above water, and from a good deal of personal observation I do not consider the statement an exaggeration.

Nature has specialised in the architecture of the Loon, as this bird is called in America, to a most remarkable extent, for although its legs and feet are so useless on land that they only serve to push its body over the ground, they are highly efficient instruments for propelling their owner through the water. Even the bones within them have been so fashioned that they produce the minimum of resistance to the water when the limb is being drawn in, and the maximum when it is being thrust out.

The Black-Throated Diver is one of the shyest and wariest wild creatures I have ever tried to circumvent, and I would undertake to say that if the intruder upon the solitary privacy of a sitting female only thrust his or her head over a ridge a quarter of a mile away, the bird would instantly detect it and leave her nest. Whilst on the eggs the bird's head is constantly moving from side to side, her quick, keen eyes perpetually scanning every possible avenue of danger.

This species breeds on lochs in the extreme north and north-west of Scotland and the outer Hebrides, and, I regret to state, is much persecuted by egg-collectors and gamekeepers, the latter of whom state that they shoot it in the interests of the trout in their lochs.

BLACK-THROATED DIVER'S EGGS.

The nest is made on some narrow promontory running out into a loch, or upon a low grassy island, and consists of a slight hollow in the ground. Sometimes it is lined with a few bits of vegetation, and at others nothing at all. It is never far from the bird's natural element, and as incubation advances she produces a well-defined track by her journeyings to and from the water.

When observed within a few feet this handsome bird presents such a picture of majestic grace and solidity that one feels as if gazing at something cut out of marble.

Whilst the female is engaged in the work of incubation her mate swims placidly about on the loch not far away, amusing himself by taking occasional dives, or lying over on his side and preening himself.

The members of this species have two very noticeable and curious habits. When swimming about on a loch unconscious of danger they often dip their sharp-pointed bills into the water, and when aware of the presence of man they will frequently swim with their heads and necks only above water. This is especially the case after the young ones have been hatched and left the nest in charge of their parents.

Turtle Dove.

"The Turtle Dove is by far the smallest member of the pigeon family found breeding in the British Isles."

THE TURTLE DOVE

THE Turtle Dove is by far the smallest member of the pigeon family found breeding in the British Islands. Although more stoutly built, it is only about the same length as the Missel Thrush, and easily distinguished from any other species either whilst on the wing or at rest. It invariably makes its presence known by cooing its soft notes which sound something like *coor-r-r coor-r-r* or *turr, turr.*

Unlike the ring, stock, and rock doves, it is not a resident species. Preferring the sunny groves of Africa to our sodden fields and fog-wreathed woods, it leaves its breeding haunts upon the wane of summer and returns again throughout April and May.

In spite of being very common in the woods and spinneys of the south of England, I have never found the nest of the Turtle Dove in Yorkshire or anywhere north of that county, although I have several times seen single birds in Westmorland, and as far north as the Outer Hebrides during June.

The male is rather larger than the female, and more conspicuously coloured, but neither of these features is particularly noticeable unless the sexes can be compared in the hand, or seen together at very close quarters.

A strange and most noticeable feature in the behaviour of this species is that it is much shyer in woods and groves where it breeds than in the open country. I have over and over again tried to photograph Turtle Doves at or near the nest

without success, although I have with comparative ease on several occasions

TURTLE DOVE'S NEST.

figured probably the selfsame birds drinking or feeding in the open.

Like its relative the wood pigeon, this species drinks considerable quantities of water, especially during hot weather, when it will thrust its bill into a pool and draw up the liquid by suction just as a thirsty human being would do.

The food of the Turtle Dove consists of different kinds of grain and seeds. I attracted the individuals figured in the heading to this article by feeding them daily at the beginning of July upon wheat, barley and dari seed, and noticed a striking partiality for the last named. The males, although popularly supposed to be the very embodiment of peace and gentleness, sometimes fight.

The nest is built in spinneys, woods, plantations, shrubberies, and old, unkempt hedges at a height varying from four to fifteen or twenty feet. The structure generally rests upon slender branches and is made of twigs, bits of dead woodbine, and occasionally dry rootlets gathered from some adjoining ploughed field. As a rule it consists only of a slight platform through which the eggs can be plainly seen from below.

These number two, of a creamy white colour and glossy texture. They are laid in May and June, as a rule, but may sometimes be met with in July and even as late as August.

Common Frogs.

"The Common Toad is a much maligned, entirely inoffensive, and withal very useful creature."

THE COMMON FROG AND COMMON TOAD

THE Common Frog, although a lowly creature to be found numerously in every part of our country, has a most interesting life history. Its metamorphosis from the tiny egg to the perfect amphibian forms a fascinating story.

In the spring males and females forgather in ponds, ditches and sluggish streams to sing their hoarse love songs and propagate their species. When the spawn has been deposited by the female it is left to the vitalising processes of Nature, and the young at no stage of their changeful career receive any kind of parental care.

The masses of eggs are always laid in water, and Bell says that at a temperature of 73.4° Fahr. the tadpoles are hatched in the short space of four days, but, as in the case of trout, the lower the temperature the longer the process is delayed. In the ordinary course of things a month is about the usual time occupied in this country.

In the tadpole stage Frogs have gills and lead a fish-like life, but as soon as the legs have developed and the tail disappeared they come to land and breathe air by means of lungs. Thus we see what an astonishing change in the organs of circulation must take place.

The breathing process in a Frog is very peculiar. The air is taken into the mouth by means of the nostrils, and reaches the lungs by being swallowed. Thus suffocation would be produced if the creature got anything fixed in its mouth in such a position as to keep the jaws apart.

Frogs feed upon slugs, beetles, worms and insects, and may be ranked amongst the gardener's best friends.

When the cold winds of autumn com-

TADPOLES.

mence to blow they retire to the bottoms of muddy pools, where it is said they spend the winter embracing each other. I once came upon a number when draining off a piece of boggy ground, but they were not keeping such close company.

The Common Toad is a much maligned, entirely inoffensive, and withal very useful creature. Its habits are much more terrestrial than those of the Frog, as it only takes to the water in the spring time for the purpose of laying its eggs, which are deposited in long strings. It is said to lay later than the Frog, and that the young ones do not change from the tadpole stage, and emerge from the water until the autumn.

Toads change their skins at certain periods, and strangely enough swallow the old cuticle as soon as it has been shed.

The tongue of the Toad, like that of the Frog, is fixed to the front of the under jaw, and when a tempting insect is espied it is darted out with lightning-like rapidity and returns with the prey affixed to its sticky surface.

Old stories of live Toads being found in cavities of otherwise solid pieces of rock reappear from time to time, and are credited by a large section of the public. Careful experiments have proved that there is no truth in them, as the creature cannot live for a period of two years without food and air.

Young Pied Wagtails.

"This is one of our prettiest and at the same time most familiar feathered friends."

THE PIED WAGTAIL

THIS is one of our prettiest and at the same time most familiar feathered friends. Its graceful carriage and sprightly movements endear it to everybody with any taste whatsoever for ornithology. Whether seen tripping lightly along the pebbly shore of a river, wading the shallow margin of a pond, running over a newly-mown lawn, or following a ploughman in search of food, it is equally at home, and always the embodiment of grace and activity.

Like the other members of its family, it is an insect eater, and when in pursuit of its prey may frequently be observed to run quickly after a fugitive fly, or flutter straight in the air in order to catch one passing overhead.

Its most popular name has, of course, been earned by its curious habit of constantly wagging its tail up and down, but it is also widely known by another, the origin of which is not so apparent, viz. the Dishwasher.

The flight of the Pied Wagtail is peculiarly undulatory, the rise being caused by a few vigorous wing beats, and the fall by a sudden cessation of action and the partial closing of the wings. During flight this species very frequently utters its call-note, which sounds something like the syllables *chiz-zit*.

Although numbers of Pied Wagtails winter in the more sheltered parts of the British Islands, the bird is largely migratory, and during the spring I have seen small newly-returned flocks roosting in reed-beds on the Norfolk Broads.

This species exhibits great catholicity in the selection of a nesting site. It may sometimes be found in ivy, trained against the walls of a dwelling house, in a hole in an old, dry wall, in a crevice of rock, amongst loose stones on the ground, on a beam in a boat-house, in

the side of a rick, beneath an old bucket standing upside down in a garden, the

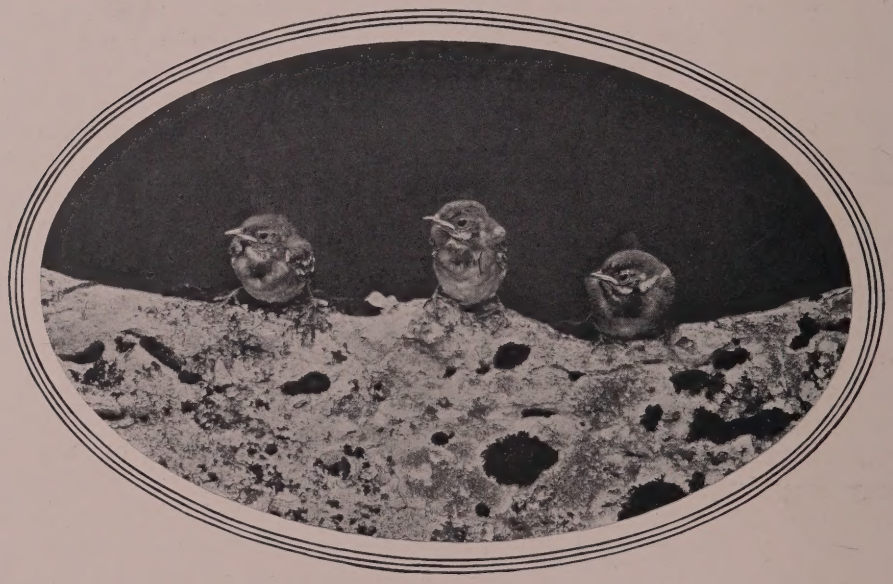
THE PIED WAGTAIL.

parent birds finding ingress and egress through a rust-eaten hole in the bottom of the utensil. I have also known a pair build inside the disused nest of a blackbird, and another on the spring of an old locomotive tender standing in a much used siding.

The structure is made of dead grass, rootlets, moss and fern fronds, with an inner lining of down, feathers, or hair.

From four to six eggs are laid of a greyish white ground colour, thickly spotted with ash grey or light brown. They are subject to considerable variation in ground colour and markings, and are laid during March, April, May and June.

The male bird helps the female to feed the young ones, but is, as a rule, considerably shyer. He may be distinguished from his mate by the fact that he is rather larger and more pronounced in his coloration. The young ones, if disturbed, will leave the nest before they can fly and hide in any little hole into which they can squeeze their bodies, but will, if possible, return to their old home to roost.



REED WARBLERS.

"The nest is a marvel of architecture."

" Its nest is generally built over the water, and fixed to two, three, or more reeds."

THE REED WARBLER

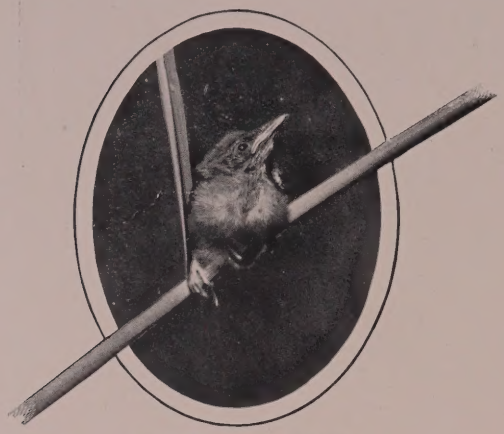
THE Reed Warbler is not easily confused with any other British bird excepting, perhaps, its rare relative, the Marsh Warbler, which is a vastly superior vocalist. It is about five and a-half inches in length; brown in colour on its upper parts and white underneath; the rump is tinged with chestnut, and the breast and sides with reddish buff. The legs and toes are slaty brown.

The favourite haunts of the Reed Warbler, as its name implies, are to be sought in fen lands, where its chattering song may be heard morning, noon, and night, proceeding from some dense retreat in which it loves to skulk and hide. Its song is not so loud or harsh as that of the Sedge Warbler, and is not often heard when the great reed beds in which it lives are billowed and tossed by strong winds.

Its nest is a marvel of architecture and constructive skill. It is generally built over the water, and fixed to two, three, or more reeds, with which it sways to and fro, like a cradle, in response to every breeze that blows. The abnormal depth of the structure prevents the eggs from rolling out when the sitting bird is absent, and scarcely anything excepting her bill and tail are seen when she is engaged in the work of incubation.

The nest is composed of dead grass, cleverly interwoven seed-branches, and

sometimes bits of wool, with an inner lining of fine dry grass and hair. When



YOUNG REED WARBLER.

only supported by two smooth reed stems I have known a Reed Warbler's nest slip down so much on one side that the chicks within it were in imminent danger of being precipitated into the water below.

The eggs of this species number from four to six of a dull greenish white, or greyish green ground colour, spotted and blotched with darker greyish green and light brown. They are subject to variation both in regard to the tint of the ground colour and markings.

The male helps the female with a will in all her maternal cares, and many a beautiful picture of tender solicitude may be witnessed whilst studying the home-life and habits of these sprightly dwellers upon the banks of sluggish stream and mere.

The Reed Warbler arrives upon our shores during the latter part of April, and departs again in September for the more congenial climes of Africa, though individuals linger with us occasionally even as late as December.

Young Hare.

"About sundown they rise from their forms and commence to search for food."

THE COMMON HARE

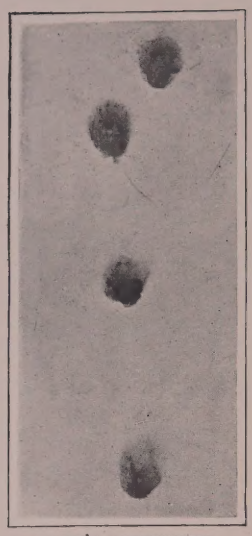
THE Common Hare is too abundant and well known to need description, and I will therefore content myself by mentioning some of its interesting habits.

Although destitute of any kind of defence against its enemies, Nature has endowed this timid animal with wonderful compensating powers. Its coloration is admirably adapted for concealment, and its senses of sight and hearing for detecting danger from the presence of which its strong limbs can carry it with great swiftness.

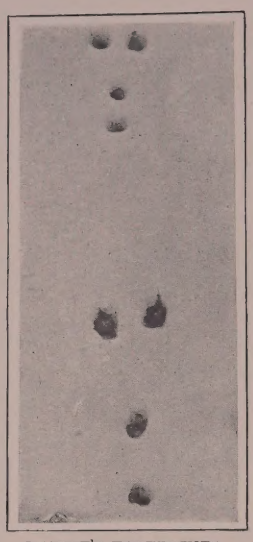
Hares are most active by night, and spend the greater part of the day in a seat or form, the situation of which is chosen according to wind, sunshine and season. In the winter a sunlit slope sheltered from the wind is preferred, but in the summer these factors do not appear to enter so much into the consideration of the animals.

About sundown they rise from their forms and commence to search for food, hopping leisurely over the ground and stopping ever and anon to sit up on their haunches and with ears erect listen intently for any sound of approaching danger. Upon retiring to their seats in the early hours of the morning they practise a wonderful piece of deception whereby to mislead any enemy likely to track them by scent. Travelling for some distance in a direction they have no intention of ultimately pursuing, they double back along their own tracks some way, and leaving them by a tremendous bound to right or left, go off at right angles to repose for the day. I have known a very suspicious animal repeat these cunning tactics two or three times over before retiring to its form.

During severe winters Hares frequently resort to what is known in the north of England as "caving." This



HARE'S FOOTPRINTS IN SNOW.



RABBIT'S FOOTPRINTS IN SNOW.

These photographs show the tracks of animals advancing *up* the picture. The two lower marks directly in front of each other are made by the fore feet and the higher of the four by the overlapping hind ones.

consists of scratching a tunnel or burrow in some deep drift of snow and spending the day therein.

It is always easy to distinguish a Hare's footprints in the snow from those of a rabbit, because in addition to making larger marks the former animal nearly always sets down one hind foot a little way in front of the other, whereas a rabbit running leisurely over the ground invariably places its hind feet opposite to each other.

In the pairing season Hares are astir a good deal by day, and anyone who has watched two males fighting will easily understand and appreciate the saying "As mad as a March hare." Standing up on their hind legs, they box each other with their fore feet, dance round, and produce the most indescribable sounds. I have watched many kinds of birds and beasts in combat, but never saw anything half so grotesque as a couple of Hares fighting.

Some authorities state that two litters of young Hares are produced each year, whilst others are of opinion that more are born. From two to five young ones are brought forth at a litter. Leverets are born with their eyes open and a good coat of down upon their bodies. No kind of nest is prepared by the mother for their reception.

Female Yellow Hammer feeding Young.

"The nest . . . is constructed of dry grass, rootlets and moss."

THE YELLOW HAMMER

THE Yellow Hammer, or Yellow Bunting as it is otherwise known, is common in nearly every part of the country where cultivated fields separated by hedgerows and interspersed by furze-clad commons and bramble-grown pieces of waste land are to be found. The male is rather larger than the female, but this is not such a noticeable sexual difference as the coloration of the plumage affords. He has more yellow and less brown on his body than his mate. If it be remembered that in neither sex of this species is there any black or brown under the chin, the chance of confusing the Yellow Hammer with its much rarer relative the Cirl Bunting will be well-nigh impossible.

Although the song of the male consists only of a few notes repeated with a persistence some people consider wearisome, it has its virtues. It is uttered early in the spring when almost any bird voice is welcome, is not very loud, and is, therefore, lost in the fine chorus of May and June, and heard again when all other feathered vocalists are silent towards the close of summer. Whilst preparing the present article at the end of July I have been making observations in a sheltered dell where throughout May the early morning air palpitates with the songs of thrushes, blackbirds, skylarks, chaffinches, robins, nightingales, tree pipits and wrens, and noticed that every voice was hushed, saving that of the Yellow Hammer. All alone in his vocal glory he was telling his sitting mate the old, old story, *tic-tic-tic-e-ereze.*

The food of the Yellow Bunting consists of grain and the seeds of all kinds of weeds in the winter, and insects throughout the summer. It is a late breeder, and I have never found its eggs

before the beginning of May, although it is said to lay in April. They may be

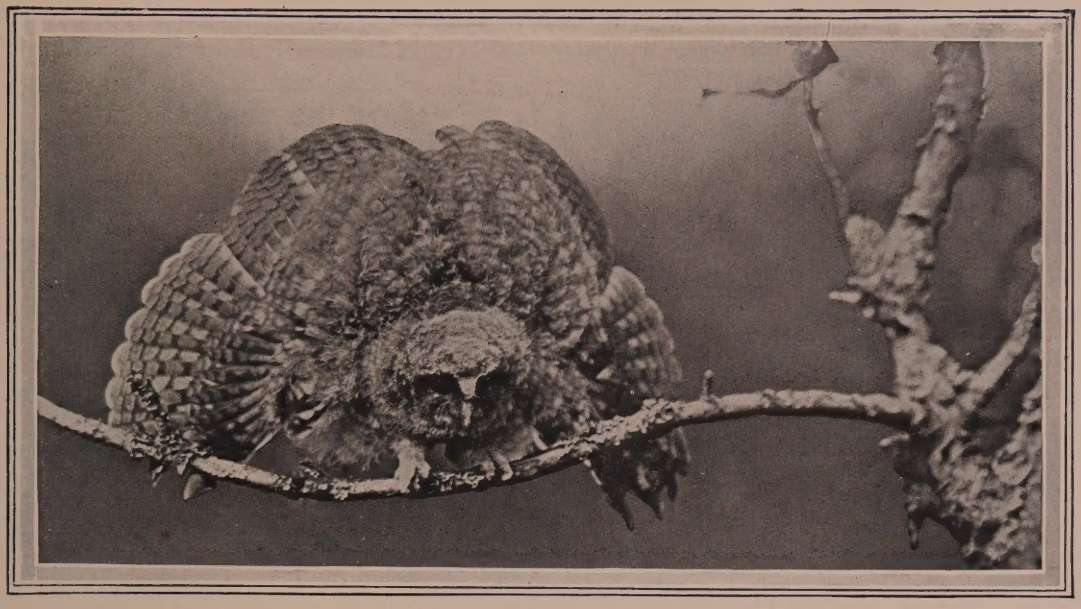
YELLOW HAMMER.

met with frequently in July and sometimes as late as August and even September.

The nest is generally situated near the ground in long grass growing round the foot of a small bush, in a bramble or at the foot of a hedge, but may occasionally be found in a thick evergreen, eight or ten feet from the ground. It is constructed of dry grass, rootlets and moss, with an inner lining of fine dead grass and horse-hair. From three to six eggs may be found in a clutch. They are dingy white tinged with purple in the ground colour, blotted, spotted and scrawled with purplish brown, and underlying markings of purplish grey.

The male is said to assist in the work of incubation, and sometimes to beguile the tedium of his task whilst doing so by singing. I have given the species a good deal of attention in different parts of the country, but have never known him do either, although he is very assiduous in his attentions to the chicks as soon as they have been hatched.

Young Long-Eared Owls.



" Towards sundown young Long-Eared Owls, when old enough to sit about in trees, call to their parents in weird whistling notes."

THE LONG-EARED OWL

THE Long-Eared Owl is a handsome bird. When seen in daylight, standing on some dead lichen-clad stump, its upright carriage, bright yellow eyes and long ear-like tufts—which it can erect or depress at will—give it a striking appearance. Its nocturnal habits, silence, and the nature of the dark gloomy spruce woods in which it loves to dwell, all combine to give the impression that it is rarer than it really is. I have met with it within a few miles of London, and have reason to know that it is fairly common in many Surrey woods.

It preys upon rats, mice, voles, and small birds, and, from a close examination of the places where the last-named have been struck, I have no doubt that they are captured in the dusk of evening after retiring to roost. How useful it is to the agriculturist may be seen when it is mentioned that as many as eight voles and mice may sometimes be seen lying on the edge of a nest containing young ones.

This species does not trouble to build any kind of nest, and if the old habitation of a crow, wood-pigeon, heron, magpie, or squirrel cannot be found, it will readily descend to the ground and lay its four or five smooth white oval-shaped eggs under a stunted fir, tuft of heather, or other kind of growth affording suitable cover.

The Long-Eared Owl does not appear to be much inconvenienced by a strong light, and I have watched it hunting for prey, and bringing short-tailed field voles to its nestlings long before dark. Before the young ones have commenced to feather, the female covers them by day, and when disturbed will fly to and fro over the nest, performing the most

peculiar aerial antics. The wings are made to meet over the back and beneath

LONG-EARED OWL NESTLINGS.

the body with such force that when they come together in the former position they produce a surprising sound, and this in spite of the fact that the feathers are soft and covered with a fine, down-like substance in order that the birds may approach their prey in silence. When in this disturbed condition of mind the female will alight on the top of some dead tree-stump and give vent to weird cries, somewhat suggestive of the mewing of a cat.

One day, whilst I was roaming about in a plantation in the neighbourhood of Thurso, a bird of this species flew close over my head and disappeared beneath some stunted fir-trees not far away. Presently I heard cries, so like unto those produced by a young rabbit when caught by a stoat or weasel, that I rushed along thinking that I might be able to save the unfortunate animal's life. Upon arriving at a place where I could get a good view beneath the trees, I discovered to my amazement the Long-Eared Owl lying flat upon the ground with both wings spread out. I had wandered too near her young ones for her peace of mind, and she was trying to decoy me away from their presence.

Towards sundown young Long-Eared Owls, when old enough to sit about in trees, call to their parents in weird whistling notes which can be heard at a considerable distance.

CHAFFINCH AT NEST.

"The nest is a beautiful example of avian architecture."

"The nest is cup-shaped and built of moss, wool, down, and spiders' webs closely woven and felted together."

THE CHAFFINCH

THE Chaffinch is exceedingly well known all over the British Islands, wheresoever anything in the nature of a tree attempts to grow. It is a resident species, but subject to a considerable amount of wandering, some of our home-bred birds crossing the Channel and having their places filled by arrivals from more northern parts of Europe in the winter time. A curious thing in regard to the habits of this bird is that flocks consisting almost exclusively of males may be seen in one part of the country and of females in another, whilst congregations may sometimes be met with in which both sexes are fairly equally represented.

During the autumn and winter Chaffinches frequently associate with greenfinches and house sparrows, and may be seen diligently hopping over stubble fields or round farm buildings in search of grain and seeds.

The handsomely coloured male is an accomplished vocalist. He commences to utter his song as early as February, if the season be mild and open, and continues until the end of June or beginning of July. Early in the season it is only a mediocre performance, but he practises literally thousands of times per day until it reaches perfection, when it becomes a clear melodious ditty, the notes of which have not inaptly been likened to the words: "Will you, will you, kiss me, dear."

The call note is a clear, ringing *spink, spink, spink,* which is, like that of the blackbird, also used as an alarm cry, and uttered with great vehemence when the bird is angry.

The nest, which may be found during

April, May, and June, is a beautiful example of avian architecture. It is cup-

CHAFFINCH'S NEST.

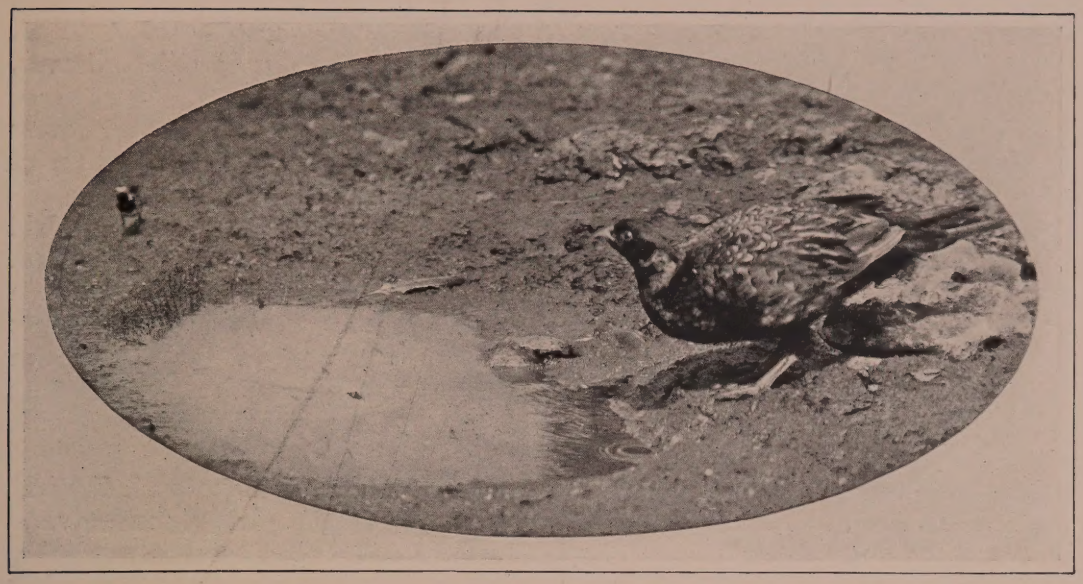
shaped and built of moss, wool, down, and spiders' webs, closely woven and felted together, lined on the inside with horsehair and a few soft feathers, and adorned on the outside with bits of lichen. Occasionally small pieces of paper are used for the latter purpose. The structure is generally placed in the fork of a small tree or upon a horizontal branch at a height of from three to twelve or fifteen feet.

The eggs, numbering from four to six, are pale greenish blue, suffused with faint reddish brown as a rule, and streaked and spotted with purplish buff.

Both parent birds are very assiduous in their attentions to the young, and the male frequently indulges in his jovial song after delivering his catch of caterpillars and other forms of insect life.

A curious accident befell one of the chicks figured in the coloured plate a day or two before it fledged. Whilst passing the nest one evening I noticed something dangling from the side of the nest and discovered that it was a young bird suspended by a single horse hair twisted round its leg. The unfortunate creature was quite cold and gasping with the spasmodic irregularity of approaching death. Releasing it I put its icy little body between my sweater and my side for half an hour. This resuscitated it, and I had the ultimate satisfaction of watching it fly away with its brothers and sisters.

Pheasant on Nest.



"Wood and water are essential to its well being."

THE COMMON PHEASANT

IT is a generally accepted belief that the Romans first introduced this beautiful and eminently useful bird to the British Islands. Wood and water are essential to its well being, and although it has been known to maintain itself in a perfectly wild state in some favoured districts for a period of upwards of forty years, it is very doubtful whether it would be able to do so indefinitely without the fostering care of man.

There are very few places where pure-bred examples of the Brown or, as it is sometimes called, Old English Pheasant, are to be met with, on account of the fact that it has been crossed almost everywhere with the hardy Chinese or ringed species.

The males are very pugnacious, and being polygamous birds, as we now know them, fight desperate battles in the pairing season whilst gathering together the members of their harems. At such times I have known them indiscreetly enter a farmyard and try conclusions with a rooster.

The food of the Pheasant in a feral state of existence consists of grain, seeds, young shoots, berries, acorns, hazel nuts, and different kinds of insects. The species is said to be particularly fond of wireworms, for which curious and useful predilection all agriculturists ought to be grateful.

The nest is made on the ground amongst rough grass, at the foot of a hedge, beneath brambles, bracken, and undergrowth in woods, coppices, and plantations. Hedgebanks on public roadsides would appear to exercise a peculiar fascination, and during a morning's walk I have had three or four sitting pheasants shown to me by a friend in such situations. Positions of this kind are not so dangerous as they might at first sight appear, for, by a wise provision of Nature during the critical period of

A SITTING PHEASANT.

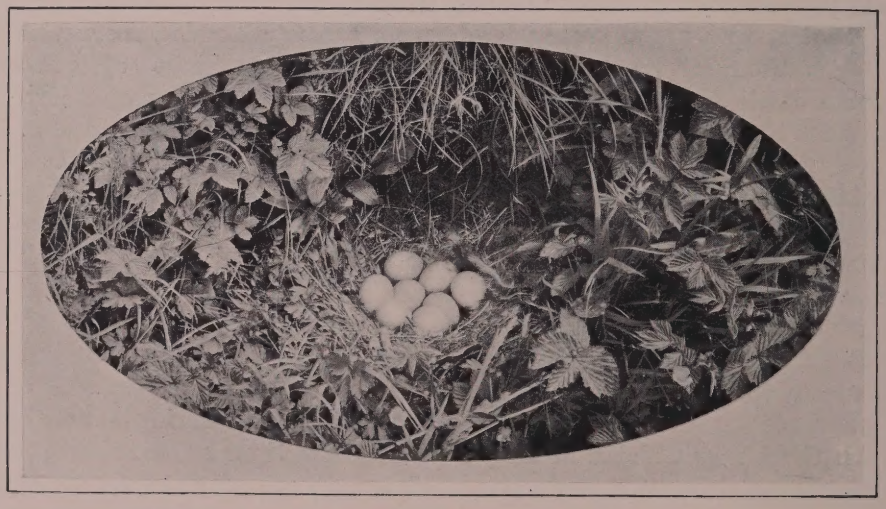
incubation, very little scent is thrown off the bird's body, and her enemies are thus deprived of their greatest chance of discovering her. Sometimes a nest may be found at the foot of a tree without any kind of surrounding vegetation calculated to hide it, or amongst comparatively short grass in an open field.

The structure consists of a slight hollow, lined with a few dead leaves, blades of withered grass, bracken or fern fronds, with which the bird covers her eggs whenever she leaves them of her own accord.

The eggs, which are generally laid throughout April and May, number from eight to thirteen as a rule, although as many as seventeen may sometimes be found. They are usually olive brown in colour, but specimens may sometimes be found of a greyish white, tinged with green or bluish green.

Female Pheasants make but indifferent mothers, and frequently lose several members of a brood through not going back to the place where the family was scattered by some sudden alarm.

Young Pheasants sleep on the ground amongst potatoes and other cover until their first moult, but I have known hand-reared birds take to the trees the very first night after they have been turned into a wood, greatly to the distress of their foster mothers left in the coops below.



Red Deer.

"This noble animal still retains some of its ancient glory."

THE RED DEER

ALTHOUGH this noble animal has fallen from the high esteem in which it was held during early Norman times—when it was considered a greater crime for a poor man to destroy a Deer than to take the life of a fellow creature—it still retains some of its ancient glory, as is evidenced by the large number of parks in which it is kept, and the high rents charged for shooting it in Highland forests.

The Red Deer originally roamed over the greater part of Europe, and is still to be met with in a perfectly wild state to a limited extent in both England and Ireland, and more extensively so in Scotland, on account of the more mountainous character of that country.

It is a gregarious animal, although the old stags only consort with the does and young males during the "rutting" or breeding season, which occurs at the end of September and beginning of October, and lasts for about three weeks. During the first-named month the stags grow very uneasy and roam a great deal, bellowing until the hills ring with their challenging notes. When a rival is encountered a fierce battle is waged, and the victor proudly marches off with the hinds, that have been looking on, as his reward.

Calves are born at the end of May and beginning of June in some sequestered spot carefully selected by their dam.

Stags drop their antlers during the spring, and, although apparently ill-equipped for such a difficult task, eat them. Whilst wandering about in Highland forests I have, on more than one occasion, come upon a partly consumed

horn. The annual shedding and re-growing of antlers may be reckoned

RED DEER.

amongst Nature's most wonderful performances. It is said to represent the production of the greatest weight of bone in the least given time known to science. A fully-grown Scottish stag will produce antlers weighing from twelve to fifteen pounds in the space of as many weeks.

When the animal casts its horns it retires to some secluded spot and awaits the growth of its new ones. These are at first covered by a soft downy coat called "velvet," and are so susceptible to injury that a slight scratch will produce a flow of blood from the wound. As soon as the antlers have attained their full growth for the season, and have become sufficiently hard, the stag rubs them against the boughs of trees until he dislodges the dead covering skin or "velvet."

In the summer the old stags retire to the higher parts of the hills, whilst the hinds and young seem to prefer the lower ground. In Mull and other places I have watched stags come down to the lochs in the early hours of the morning and after drinking return to their feeding ground.

The food of the Red Deer consists of grass, leaves, young shoots, acorns, beech-mast, and—when they can be got at—potatoes. The last-mentioned discolour the teeth of the animal to some extent.

The Corncrake.

"The nest is made on the ground."

THE CORN CRAKE, OR LAND RAIL

THE Corn Crake, or Land Rail, is a summer visitor arriving in April and May, and leaving again during September and October. It is a lover of cover and frequents fields of green corn, mowing grass, osier beds, and rough pastures such as are to be found on the shores of lochs in the Hebrides.

Soon after arriving it makes its presence known by uttering its harsh creaking call notes, which are unmistakable and may be heard at all hours of the night, and frequently by day, especially in dull, sultry weather. Many people have an idea that this bird is a ventriloquist, but I believe that the alteration in the locality of its notes is frequently caused by the creature stealthily shifting its position. I have had many opportunities of studying the species at close quarters, when the cover has been scanty during a backward spring, and have watched individuals running quickly from one point to another, stopping ever and anon to utter their call notes. On one occasion I detected a Corn Crake standing beneath a large coltsfoot leaf, and it certainly did appear to be able to throw its voice from different points, but I believe that this feat was accomplished partly by the leaf acting like a sounding board and partly by the bird altering the position of its head.

The Corn Crake appears to be as ill adapted for long flights across the sea as it is for a stubborn fight, and yet it can accomplish both these tests of endurance with astonishing success. Some years ago I watched two males wage a savage and protracted battle in a Highland croft, and was greatly surprised

THE CORN CRAKE.

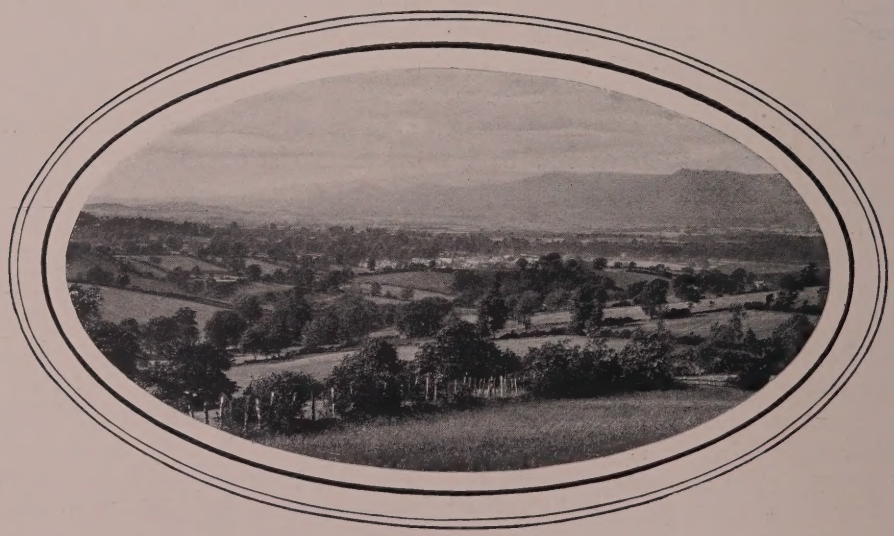
at the amount of pluck and tenacity they displayed.

Although partial to certain districts well adapted to its breeding habits, the Land Rail is liable to considerable variation in point of numbers from year to year. This may be due, in a measure, to the perils of migration, for it is well known that disaster occasionally overtakes large numbers of the species whilst on passage during the prevalence of foggy weather.

The nest is made on the ground amongst mowing grass, standing corn, clover, nettles and other forms of rough vegetation that afford ample cover. It consists of stems and blades of dead grass and leaves, and is added to from day to day whilst the eggs are being laid, more especially if the clutch should be a large one. In such circumstances I have on more than one occasion known green blades of grass to be used.

The eggs number from seven to ten as a rule, but as many as twelve or fifteen are occasionally found. They are large for the size of the bird, and of light buff or pale reddish white ground colour, blotched, freckled and spotted with reddish brown of various shades and ash-grey. The majority of them are laid during May and June, but clutches may frequently be found in July and sometimes even in August.

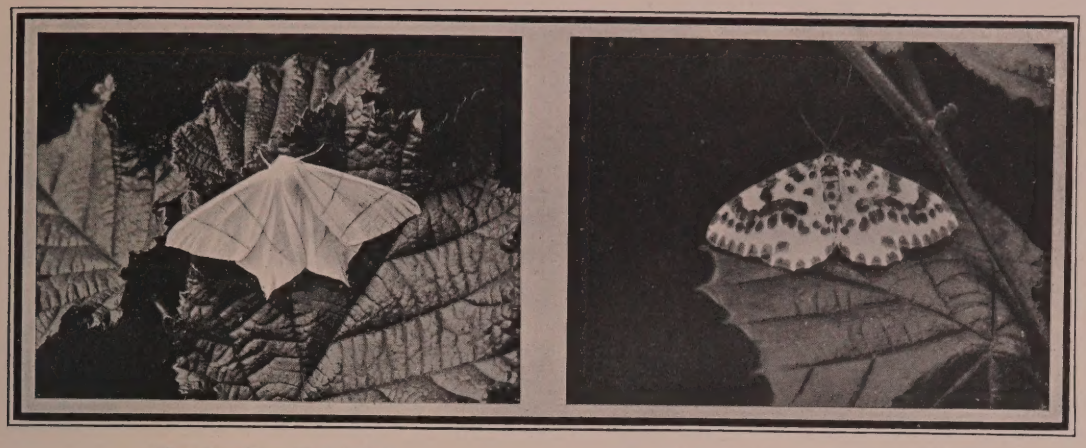
The female sits closely, and when disturbed slips away without any kind of demonstration. If compelled to rise, she flies very laboriously, with both legs hanging down, and leaves the observer wondering how she accomplishes her long over-sea journeys.



THE GREEN CARPET MOTH.

(Slightly enlarged.)

"It harmonised with its surroundings in the most wonderful way."



The Swallow-Tail Moth.

The Magpie or Currant Moth.

MOTHS

THE most casual observer living in the country is aware that moths and butterflies are very much influenced in their numbers and activity by the kind of weather prevailing. I am in the habit of working late at night, and notice an astonishing difference between the numbers that enter my study window during a hot, dry summer and a cold, wet one.

The Wood Leopard, although widely distributed in three continents, is by no means a common moth. In the caterpillar stage it lives in the trunks and branches of ash, apple, and other trees. Although a handsome creature—with a very appropriate popular name—it is just as well that the limitation of its numbers should prevent it from ranking amongst the destructive pests.

In appearance the Puss Moth reminds one of a Persian cat. Its white wings and body, marked with black spots and dark grey transverse lines, render it a handsome insect. If irritated, the caterpillar of this species possesses the power of discharging an acrid fluid from an opening in the throat.

The Magpie, or Currant Moth, flies by day as well as by night, and is cordially hated by gardeners on account of the destruction it does in the caterpillar stage to the leaves of currant and gooseberry bushes. It is a most unpalatable creature and, as birds will not touch it, can afford to dress in striking colours that render it easily seen whether on the wing or at rest.

During some seasons the Swallow-Tail Moth is quite common. Its fore wings are of a delicate yellow colour marked by two narrow transverse lines of olive brown. It is a conspicuous insect when on the wing during a July evening.

The Tiger Moth, one of our largest and handsomest insects, is capable of a wing expansion of between two and three inches. The dark parts of the fore wings shown in our illustration are of a rich coffee brown colour, and the light ones either creamy yellow or white, the species being liable to considerable variation.

The White Plume Moth is one of the most delicately formed insects to be found. Its fore wings are divided into

The Oak Eggar Moth.

The Tiger Moth.

The White Plume Moth.

two, and its hind ones into three parts by deep clefts, and its long, slender legs remind the observer of those of the crane fly.

Although said to be common, I have not met with many specimens of the Green Carpet Moth, the fore wings of which are a delicate mixture of pale green and dusky brown, divided by white lines. At a little distance the specimen represented in our coloured plate harmonised with its surroundings in the most wonderful way. For the purposes of reproduction the photograph of the moth and its surroundings has been somewhat enlarged, so that the insect is a little above its natural size.

The Puss Moth.

Wood Leopard Moth.

Young Wheatears.

" The Wheatear may always be easily distinguished by its habit of perching on the top of a stone wall, rock, or other eminence."

THE WHEATEAR

THE Wheatear is one of the commonest and, in some respects, the most interesting of our summer visitors. Arriving in the south and east of England in March, it quickly finds its way to its favourite breeding quarters on dry barren heaths, and desolate treeless wastes, from which it retreats again in a southerly direction during August and September.

Whilst undertaking its long and hazardous migratory flights across the ocean it sometimes loses its bearings and wanders too far west. Some years ago, whilst returning from New York in the early part of May, I was surprised to see a male Wheatear alight on the ship when we were some three hundred miles west of the Irish coast, and my friend Mr. Richard Ussher records an instance of two birds of this species doing a similar thing in about the same longitude on a western-bound boat, which they accompanied all the way to America.

The Wheatear may always be easily distinguished by its habit of perching on the top of a stone wall, rock, or other eminence, and, when disturbed, flying off with a great display of white rump, and alighting again at no great distance in front of the observer. Its call note, which is very characteristic and frequently uttered, sounds very like the words *chick-chack-chack*. The male has a short but rather pretty song, which is generally uttered whilst he is fluttering in the air. It is of such a weak character, however, that it is hardly

NESTING SITE OF WHEATEAR.

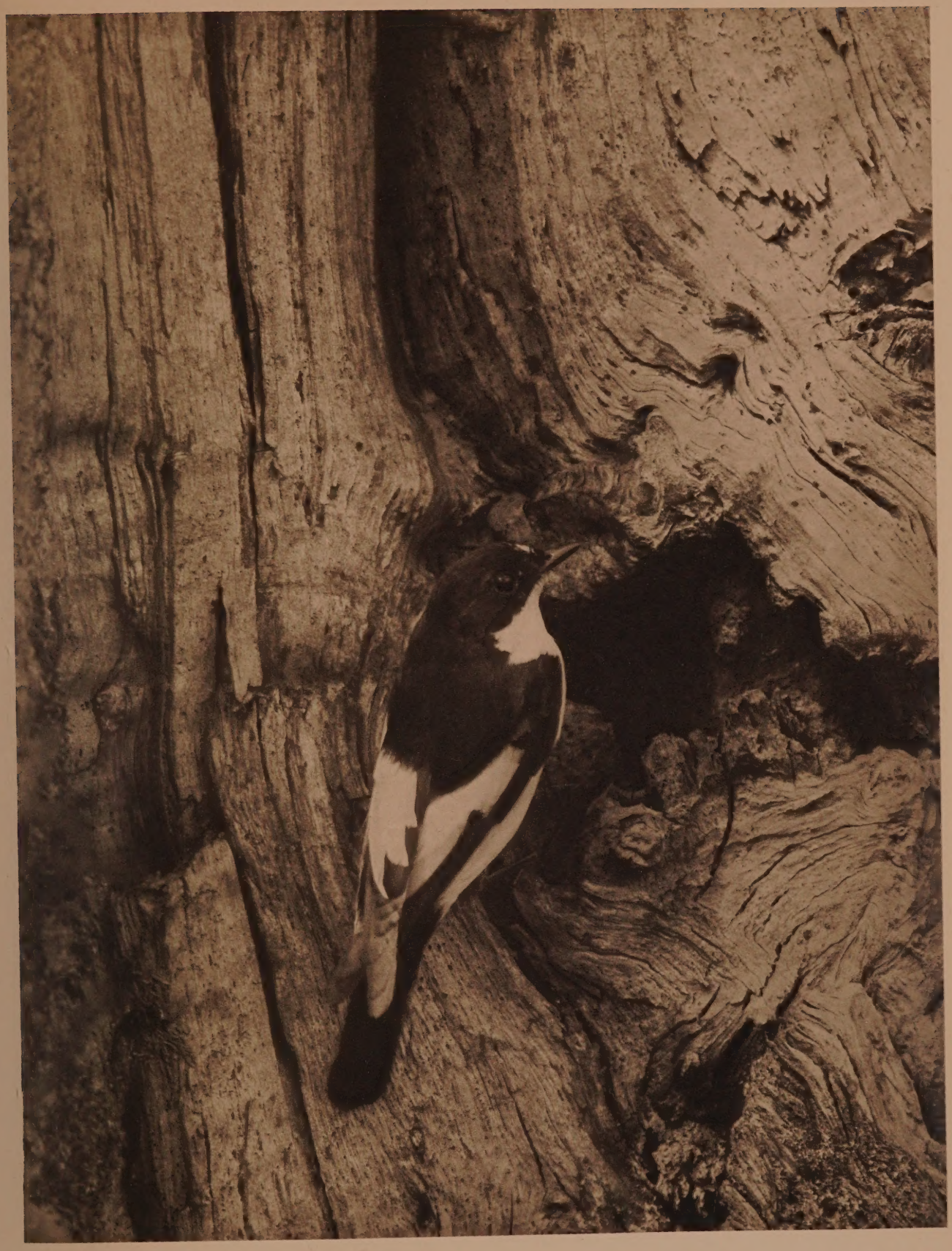
noticed except when heard in silent solitudes.

Although breeding most numerously on high moorland, and rock-strewn uncultivated districts in the north of England, Wales, Scotland and Ireland, it may be found in almost any locality suitable to its habits. Not long ago I discovered a pair breeding on a disused rifle range within seventeen miles of the centre of London.

The nest is made in holes in rock, amongst loose stones, in old dry walls, peat stacks and in deserted rabbits' burrows. It is composed of dead grass, rootlets, moss, hair, down and feathers, and, if the accommodation will permit of it, is usually a bulky structure.

The eggs, which are laid in April, May and June, generally number five or six. I have never seen fewer than four or more than seven, although clutches of eight are said to have been found. They are pale greenish blue in colour, and upon rare occasions are said to be marked with small rusty spots.

During the summer of 1910 I had two curious experiences whilst studying members of this species. I found a family of chicks being reared entirely by their father, whose mate had probably fallen a victim to some hawk, and two males existing in apparent bachelorhood. They lived in a secluded rock-strewn hollow, and, although I kept them under observation during the month of June, heard them both sing frequently, and watched them quarrel on more than one occasion, I never once saw a female near the place.



Male Pied Flycatcher at Nesting Hole.

"The male has the appearance of a miniature magpie."

THE PIED FLYCATCHER

THIS sprightly little migrant arrives during the month of April, and departs again for less rigorous climes in September and October. Some authorities state that it breeds most numerously in the north of England, but personally I have met with far more nests in mid-Wales than I have ever found in the reputed haunts of the species in Cumberland, Westmorland, or Northumberland.

The male has the appearance of a miniature magpie, the voice of a redstart, and the manners of a Spotted Flycatcher, with perhaps the single reservation that he descends oftener to the ground to pick up caterpillars and insects, which his keen little eyes detect from an incredible height, whilst he is moving about in the branches of trees above.

The Pied Flycatcher breeds sparingly in the south of Scotland, but is only a rare and accidental visitor to Ireland. I have seen it in the Eastern Counties of England, but have never found its nest there.

Whilst the female is engaged in the work of incubation the male appears to spend nearly all his time hanging round the neighbourhood of the nesting place, singing his short, pretty song, which may easily be mistaken for that of the redstart, and chasing away any rival that may happen to wander too near what he regards as his own special locality. On one occasion I found several pairs of these interesting birds breeding in a comparatively small wood, and observation proved that the males were very jealous of each other.

The nest is made in holes in decaying tree trunks and broken stumps as a rule, but may sometimes be found in an old wall or crevice of rock. It

FLYCATCHER AT NESTING HOLE.

consists of moss, dry grass, and occasionally leaves, and is lined with hair and feathers. The same hole is frequently used for several seasons in succession.

During May or June from five to eight eggs of a pale blue or greenish-blue, somewhat similar to those of the redstart, are laid. Occasionally they are marked with small reddish brown spots.

The Pied Flycatcher is not quite so large as a redbreast, and the white patch on the forehead of the male differs in point of size in individuals. The female does not possess it, and is otherwise less distinctively marked than her mate.

A noticeable feature in the behaviour of the species is that if the female leaves the nest her mate is very assiduous in his attentions, feeding her upon caterpillars and other insects whilst they fly from bough to bough and tree to tree, but if she should delay her return to the nesting hole too long he will endeavour to drive her back to her duties.

The individual figured in the headpiece to this chapter grew very angry because his consort was afraid to face the ordeal of my camera, and repeatedly attempted to exercise the authority of his sex, but failed to induce her to return until he literally bribed her by flying down to the mouth of the hole with a large caterpillar in his bill.

The Water-Rail.

" Its nest is well hidden in sedge, clumps of rushes and other thick growths."

THE WATER RAIL

COMPETENT ornithologists are of opinion that this bird is commoner in the British Islands than is generally realised. It is a lover of thick cover, and its habit of skulking amongst the great reed beds growing on the margins of lakes and meres renders it most difficult to observe. The presence of the species would never be suspected in many parts of the country at all were it not for the utterance of its weird call-notes, which sound something like a prolonged grunt ending in a kind of squeal. The bird figured in our illustrations uttered her strange call-notes whilst walking quite close to the hiding contrivance from which the photographs were taken, and in the peaceful stillness of the fens I must confess that they sounded startlingly uncanny.

The Water Rail can seldom be induced to take wing, and whenever I have seen it compelled to do so by sporting dogs, it has only flown for a short distance in a heavy, awkward manner, with both legs dangling in the air, and promptly dropped again into the nearest bit of rough vegetation that afforded cover. This seeming ill-fittedness for aerial progression and evident dislike to indulge in it are decidedly curious when it is remembered that numbers of the species undertake long flights across the ocean every spring and autumn. Tired-out individuals have been known to alight on vessels five hundred miles away from the nearest land.

The Water Rail is a migratory bird, in spite of the fact that it may be met with at all seasons of the year in different parts of the country. Extended observations have led naturalists to believe that those bred in the British Islands retire farther south to winter, and are replaced by others reared in more northern climates.

The food of the species consists of snails, slugs, worms, and the tender shoots and seeds of aquatic plants.

Its nest is well hidden in sedge, clumps of rushes and other thick growths to be found on the shores of lakes, meres, osier

WATER RAIL AND NEST.

beds and marshes. For the size of the bird it is a bulky structure, and consists of bits of dead reed, sedge grass and flags.

The eggs, which are laid during April, May, June, and sometimes as late as July, number from five to eleven, of a creamy white ground colour, marked with reddish spots and underlying dots of grey. Some authorities consider that the species is double brooded.

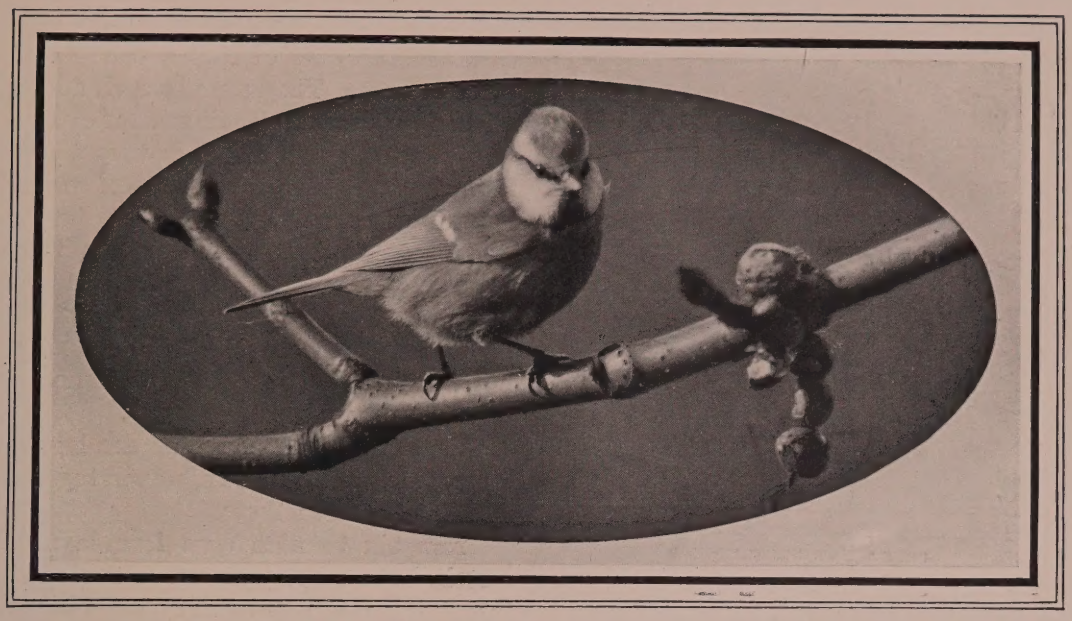
Young Water Rails, when hatched, are covered with a soft coat of black down.

The love of concealment is so great that when a nest is opened out in order that a good view may be obtained of the brooding female, the very first thing she does upon returning is to drag blades of the surrounding vegetation over her body. If this cannot be accomplished to her satisfaction, she will, as my friend, Miss E. L. Turner, has proved by a series of photographs, resort to removing the eggs one by one from the nest.

If a sudden noise, such as the firing of a gun, be made near to a marsh tenanted by Water Rails, the birds will frequently set up a cry as if in pain.

THE BLUE TIT.

"Its activity and cheerfulness are almost phenomenal."



"The engaging manners of the 'Blue Cap' endear it to nearly everybody but the old-fashioned gardener."

THE BLUE TIT

THIS is the best known and most widely distributed member of the Titmouse family to be met with in the British Islands, and although only a wee frail creature it is a bird of parts. Amongst its most distinguishing characteristics may be mentioned beauty and boldness, whilst its activity and cheerfulness are almost phenomenal. Whether it be called upon by the exigencies of Nature to enjoy a feast or endure a famine, it always appears to make the best of everything. In the summer-time males and females alike work with the proverbial industry of slaves for fifteen or sixteen hours a day, finding and conveying insect food to the members of a large family; and in the winter they may be seen hanging upside down to the sodden branches of trees, diligently examining every bud and crevice for some lurking foe to vegetation.

The engaging manners of the Blue Cap, as the bird is frequently called, endear it to nearly everybody but the old-fashioned gardener, who is, alas, full of prejudice, and far too ready to condemn upon evidence of the most superficial character. I always urge these men, when shooting birds they consider enemies of the garden, to do three things: (1) Dissect the victim and see what has actually been eaten; (2) weigh well the harm done to bud and branch by small shot; (3) put the good done by a bird at one season of the year into the scales with the harm wrought at another, and see how the account stands.

Apart from house sparrows and jays, nearly all the loss I suffer in my garden I can honestly put down to insects and my own ignorance. I do not know how

BLUE TIT'S NESTING HOLE.

to help the birds half so well as they know how to help me.

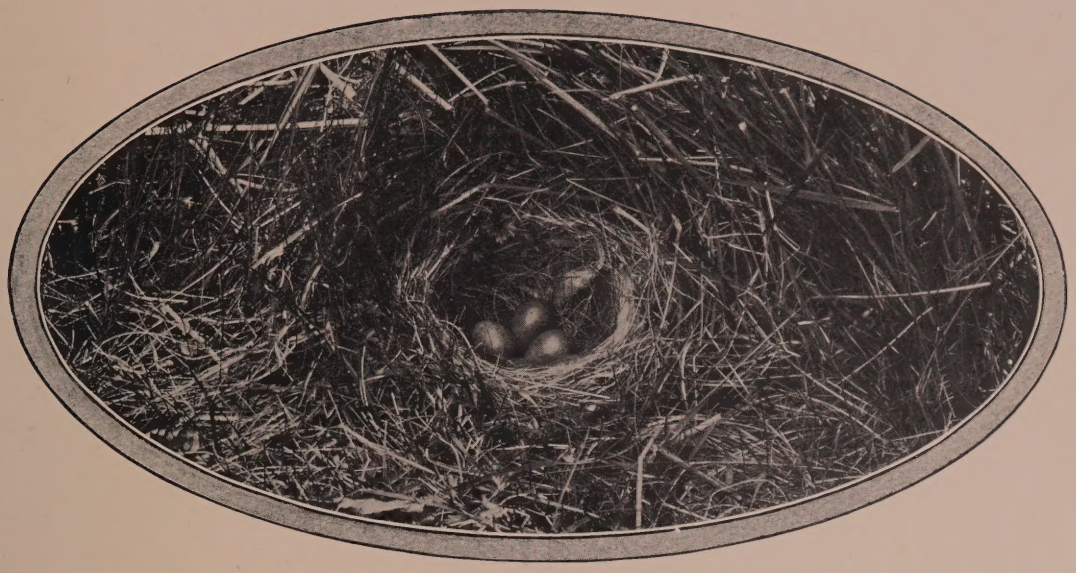
Every winter my children feed Blue Tits upon the kernels of Barcelona nuts, which are suspended by a piece of thread. This method prevents the Great Tits from enjoying a monopoly, as they are liable to do in the case of half a coco-nut or piece of suet. They are not such accomplished gymnasts as their smaller cousins, and cannot cling by their toes to the kernels and chisel pieces off whilst hanging upside down.

This species nests in holes in trees, banks, walls, disused pumps, and gate posts as a rule, but may sometimes be found occupying letter-boxes, stone bottles and other odd situations. It takes readily to nesting boxes.

The structure consists of dead grass, moss, hair, wool, or down, woven together and lined with feathers.

From six to nine eggs form a usual clutch, but as many as ten or twelve are sometimes met with. They are white in ground colour, spotted with light red or reddish brown. If the sitting hen be disturbed she hisses like a snake, and in this way sometimes succeeds in scaring off juvenile egg collectors.

Yellow Wagtail on Nest.



" The nest is made of dead grass, fibrous roots and moss."

THE YELLOW WAGTAIL

WHEN daisies and buttercups commence to bedeck our meadows the Yellow Wagtail returns from its winter quarters in Africa to enliven the landscape with its bright colours, animated manners and shrill musical call-notes, which can easily be distinguished by the practised ear from those of either the Grey or Pied Wagtails.

This species is particularly fond of flies attracted by grazing cattle. In fact, almost the same kind of relationship appears to exist between the two creatures as that between sheep and starlings. Any fine spring morning Yellow Wagtails may be observed nimbly running close round the heads of browsing cows, or beneath their bodies, without showing the slightest hesitation or nervousness, and on more than one occasion I have witnessed one alight upon the back of its benefactor.

It breeds numerously in many parts of England, such as the marshes of Norfolk and Suffolk and the dales in the North, is common in Wales and the Lowlands of Scotland, but rare and local in Ireland.

The Yellow Wagtail does not, like its kinsman, the Grey Wagtail, cling tenaciously to the waterside for breeding purposes, nor affect the haunts of men as in the case of the better known " dishwasher." It is rather partial to secluded haunts, and I have found it nesting amongst heather growing on a dry Surrey common and in rushes on the Westmorland Fells at a considerable distance from water of any kind.

The nest is made of dead grass, fibrous roots and moss, lined with horsehair, cowhair, and down. Sometimes a few feathers are used. The structure is generally well hidden and difficult to find on account of the alertness of its owners. Both sexes share the work of incubation, and give each other timely warning of any kind of danger that may happen to approach the whereabouts of the nest.

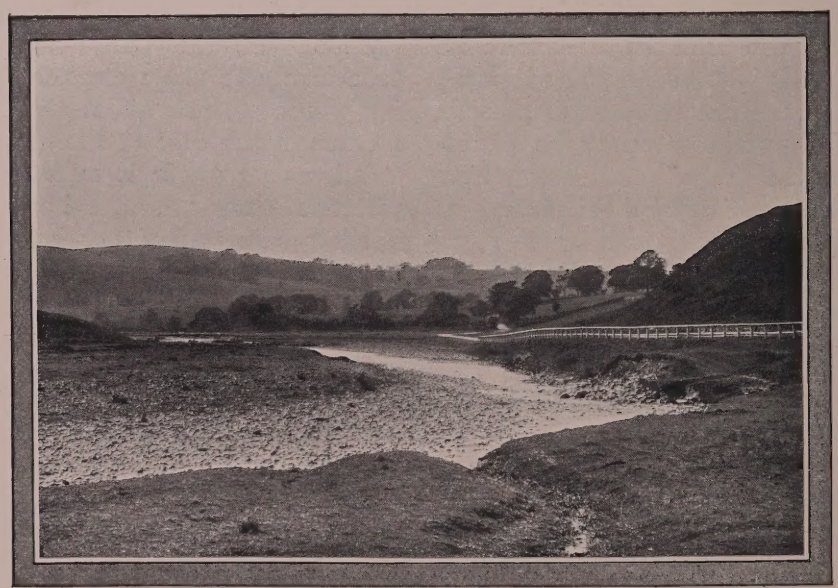
From four to six eggs may be found in a clutch. They are greyish white in ground colour, spotted and mottled with varying shades of brown. Occasionally specimens marbled with blackish brown at the larger end may be met with. The markings are thickly distributed over the entire surface of the shell. It is said to be impossible to distinguish the eggs of this species from those of the Blue-Headed Wagtail, a very much rarer bird so far as the British Islands are concerned.

YELLOW WAGTAIL.

The male helps the female to feed the chicks in the nest upon flies and other insects. Both birds nearly always appear to alight at some little distance from the structure and to complete the journey by running.

The young ones commence to fan with their wee short tails in the way common to the whole family even before they leave the nest. The adult female figured on this page had an abnormally short tail, probably due to some accident.

During August Yellow Wagtails begin to leave their breeding haunts and fly south, and by the end of September have left the country.



Arctic Skua on Nest.

"It will swoop threateningly at the head of the intruder . . . or hang in mid-air just over him."

THE ARCTIC SKUA

THE Arctic, or Richardson's Skua as it is frequently called, is an interesting, although by no means lovable, bird. If members of the feathered world had such a place as a prison house in which to punish the outlaws of their race, this robber and bully of the air would be one of the first to go there. Instead of working for its own livelihood the Arctic Skua battens upon the labours of others. Patiently watching until it sees one of the smaller gulls catch a fish, it gives chase and pursues the unfortunate fisherman hither and thither, up and down, until, harried and terrified to the point of distraction, the luckless creature is compelled to drop its prey. Once this desired end has been accomplished, the Skua changes its course, and with a rapid downward plunge frequently secures the dead fish before it can reach the surface of the sea below.

When a gull that has just made a catch shows any reluctance about rising from the water the impatient robber above induces it to do so by swooping at its head. Cases have been known where an obstinate bird that would not rise into the air has been struck and killed by the enraged marauder.

This species has not the redeeming quality of courage which distinguishes its larger and more powerful relative, the Common Skua. I have been struck on the back of my head and had my

ARCTIC SKUA'S NEST.

cap knocked off, over and over again, by the latter bird, but neither in the Shetlands nor the Outer Hebrides have I ever once been touched by the one under notice. It is true it will swoop threateningly at the head of the intruder upon the privacy of its nesting ground, or hang in mid-air just over him, if a stiff breeze should happen to be blowing, and give vent to a doleful cat-like *mee-awh* alarm cry, but personally I have never known it go further.

One very noticeable thing in regard to the behaviour of this species is the almost servile attentions of the males towards the females, and the cold indifference, not to say contempt, with which such attentions are regarded by their intended recipients. This peculiarity, however, is not confined to the species under notice alone, for in many others, and especially during the days of courtship, the unresponsive practical stolidity of the females stands out in striking contrast to the silly flippancy and grotesque antics of members of the opposite sex.

There are two distinct varieties of Arctic Skuas to be met with. One is dark sooty brown on the breast and under-parts, and the other white. This peculiar difference does not appear to be influenced by either age or sex, and a member of the light variety may frequently be found paired with a dark one.

This species breeds on wild lonely moors in the Shetlands, Orkneys, and Hebrides. The nest consists of a slight hollow in the ground amongst stunted heather, coarse grass, and moss. The eggs generally number two, varying from dark olive brown to brownish green, marked with spots and blotches of light and dark brown. The Arctic Skua is a migratory bird, arriving in this country in May and leaving again in August and September.

Avocet going to Nest.

"The nest of the Avocet is sometimes only a slight natural hollow in the sun-baked mud."

THE AVOCET

IT is a great pity that drainage and senseless persecution should have been instrumental in banishing such a beautiful and interesting bird as the Avocet from its ancient breeding haunts in the British Islands. But as members of the species still continue to visit our shores occasionally in the spring, either singly or in small companies, it is, perhaps, not too much to hope that some day a pair or two may be induced to stay and breed in a recently formed East Anglian Bird Sanctuary. Until such a greatly to be desired end is attained, perhaps the best European countries to visit for the study of this conspicuous member of the Wader family are Spain, Denmark, and Holland. In the last-named country my brother obtained the photographs that form our illustrations.

The Avocet measures nearly eighteen inches in length. Its long, curiously upward curved bill is highly suggestive of a cobbler's awl, whilst its semi-palmated feet enable it to walk with ease over soft mud flats in search of worms and aquatic insects upon which it feeds. It can swim with the greatest facility, and, when wounded, dives in order to escape its would-be captor.

On the Norfolk Broads single birds of this species consort with gulls, but in its breeding haunts on the Continent it is generally found in the company of the noisy redshank.

It breeds in suitable localities both in Asia and Northern Africa, and must have been a familiar object to ancient Egyptian artists who painted

it with wonderful fidelity on the walls of their temples more than two thousand years before the Christian era.

AVOCET'S NEST.

The nest of the Avocet is sometimes only a slight natural hollow in the sun-baked mud, with a scanty lining of straws, whilst at others it is a more elaborate structure. My old friend, Mr. R. B. Lodge, who has had many and excellent opportunities of studying the species, records the finding of several nests in Spain lined with the moulted feathers of flamingoes.

The eggs, which generally number three or four in a clutch, are of a clayish-buff ground colour, spotted and blotched with black. Both sexes share in the work of incubation, which is said to last seventeen or eighteen days.

The adult birds convey food to their young one in the same way that puffins carry sand eels—crosswise in their bills.

The Avocet is not a particularly shy bird, and will trip daintily along a stretch of wet sand or wade shallow pools and creeks in search of food comparatively close to a quiet observer, and may be photographed at the nest from any suitable hiding contrivance with comparative ease.

When disturbed on the nesting ground the members of a colony rise into the air, and fly round and round the intruder with their long legs stretched out behind whilst they constantly utter their alarm cries.

YOUNG WOOD WRENS.

"Young Wood Wrens are considerably yellower than the chicks of the Willow Wren."

"The bird may be found holding forth day after day at the same spot when its mate is sitting."

THE WOOD WREN

THE Wood Wren, or Wood Warbler as it is very frequently called, is a migrant arriving in the south of England about the end of April, and leisurely travelling north to its favourite breeding quarters, which it reaches some ten days or a fortnight later. I hear the males singing for a few days in the Surrey woods nearly every spring, but do not believe that they stay to breed, at any rate in my part of the county. The return journey in a southerly direction is undertaken during August and September.

The species, although everywhere local, is partial to old woods containing tall trees, and is found most numerously, according to my experience, in Wales and the North of England.

Young naturalists will have no difficulty in distinguishing it from its relative the Willow Wren, with which it is most likely to be confused, if they will remember that it is a trifle larger, has a broader band of yellow over the eye, is greener on its upper parts and whiter underneath. It builds a domed nest on the ground beneath a sheltering tuft of grass or dead bracken, and the structure is in every way very similar to the nests of the Willow Wren and chiffchaff, with the exception of the fact that the interior is lined with fine dead grass and horsehair, and not with feathers.

The eggs, numbering five or six, are white in ground colour, marked all over with dark purplish brown and violet grey spots. Young Wood Wrens are considerably yellower than the chicks of the Willow Wren.

Anyone with a moderate ear for music will readily identify the bird under notice

WOOD WREN.

by either its call-note or song. The former is an oft-repeated and somewhat plaintive *tway, tway, tway,* generally heard from the tops of trees, and the latter sounds something like *sit-sit-sit-sit-sit-see-eeeeeze.* Each of the opening notes of the song is uttered more rapidly than that which preceded it, until they develop into a kind of trill, rising in pitch all the time, and finally ending in a long shaky thin one. The bird frequently sings on the wing whilst moving from one bough or tree to another, and may be found holding forth day after day at the same spot when its mate is sitting. The melody is accompanied by a tremulous motion of the wings and tail, suggesting that the vocalist is shaken by the vigour of his efforts.

It has been stated that the male Wood Warbler does not sing after the young ones have been hatched. This is by no means the case, for I have frequently heard him do so immediately after feeding his offspring in the nest.

This species feeds upon insects, and is said not to add berries or other kinds of fruit to its dietary as is the case with the chiffchaff and Willow Wren.

Golden Plover covering Chicks.

Young Golden Plover.

THE GOLDEN PLOVER

FEW birds seem to fit their surroundings better than does the Golden Plover in its breeding haunts. Its softly-uttered cry, *tlüi*, is often the only sound that breaks the oppressive silence of many a lonely stretch of moorland, where there is nothing else alive to be seen, saving the melancholy-looking black-faced sheep, dreamily browsing upon the scanty herbage.

I have met with it breeding at an altitude above both the dotterel and the ptarmigan on Scottish mountain-tops, and by the sea in the Hebrides and the Shetlands, but always in desolate, out-of-the-way places.

In the spring males and females alike undergo a remarkable change in the colour of part of their plumage. The feathers from the chin down to the belly turn from a dull greyish white to a deep velvety black. This is accomplished partially by the growth of new feathers, and partially by a change in the colour pigments of the old ones.

Male and female take turn and turn about in the work of incubation and keeping sentinel, and, as the experienced ornithologist knows full well, no bird is more wary in regard to betraying the secret of the whereabouts of its nest and eggs. Upon the first sign of danger the sentinel softly utters the alarm-note *tlüi*, and the other bird runs away from the nest, and both try their best—which generally proves successful—to decoy the intruder as far away from their treasures as they can. In these circumstances I have on many occasions watched a pair of birds for hours in vain, and nearly all the nests I have found belonging to this species have been discovered by accident.

In addition to the melancholy alarm-note, which is uttered at intervals that add to its mournful character, this species has a much more rapidly uttered

GOLDEN PLOVER'S NEST.

love-note, sounding something like *taludl-taludl-taludl.*

The nest is a slight hollow in stunted heather, coarse grass, or fringe moss, and is lined with a few bits of dry grass, rushes, or small sprigs of heather. The eggs, numbering four, are of a yellowish stone or cream ground colour, marked with umber-brown and blackish-brown. They are very large for the size of the bird, and in their natural surroundings look uncommonly handsome.

In my natal part of Yorkshire, on the Pennine range, these birds generally arrive near their breeding-ground in rough weather, and take their departure in the autumn under similar conditions. They are very restless before the oncoming of bad weather, and fly a great deal by night. When a large flock is heard flying close at hand in the dark the sound of their wings cleaving the air is something like the rending of large sheets of linen. At such times the birds frequently dash into telegraph wires and decapitate themselves; and I have known them even collide with a stone wall during dark misty nights.

Many birds of this species spend the winter with us on marshes and by the sea, whilst others, especially during hard weather, wing their way to Africa.

Fallow Deer.

"In parks which are heavily stocked Fallow Deer have to work harder for their food."

THE FALLOW DEER

THIS graceful little animal adorns a great number of British parks, and is found in a more or less feral state in the New Forest and one or two other places. Although there is no definite information as to whence it came, it is supposed to have been brought from the Mediterranean countries by our Roman conquerors. It is met with in a wild state in South-Eastern Europe.

In summer the wild Fallow Deer is of a rich yellowish-brown colour, spotted all over with white, but in winter it dons a coat of a much more sombre hue.

Domestic varieties are subject to a great deal of variation both in regard to general coloration and the distinctness of their markings. I have seen individuals almost white, and others of such a rich dark brown that at a little distance they appeared to be black.

The male grows to a height of about three feet at the withers. His antlers, which are palmated in their upper parts, are shed in May and commence to grow again very soon afterwards.

The fawns are dropped in June, and occasionally two are brought forth at a birth.

My friend, Mr. J. Whitaker, in his book on "English Deer Parks," says that: "From May till October Fallow Deer rest from about 9.30 a.m. until 2 p.m., sometimes in the shade, sometimes on the top of a hill, where they can catch what little breeze there may be. During the period of rest they get up occasionally to stretch themselves, and after standing up, or scratching their sides and necks with hoof and horn, they lie down again but always on the other side. They pass their

FALLOW DEER.

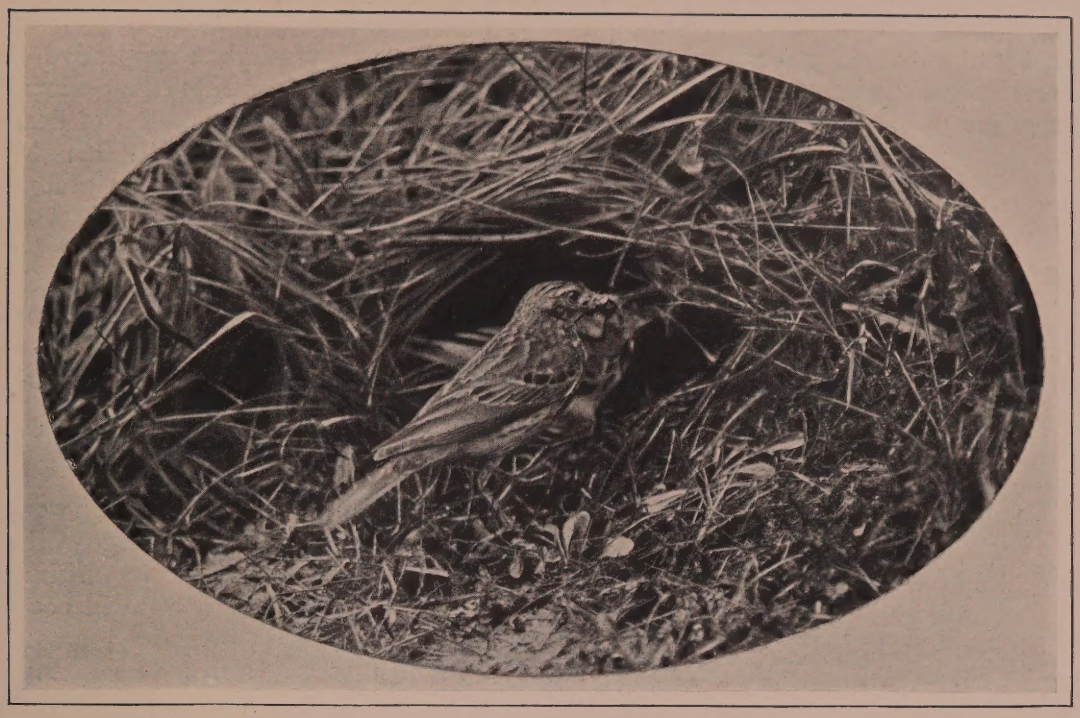
time in chewing the cud and sleeping, and, if the day be hot and sunny, will lie with all four legs stretched out, exposing as much of their bodies to the sun as they can. About 2 p.m. they feed, and wander about till 4, when they again lie down for about two hours, starting again about 6 p.m. and continuing until 9 p.m., when they rest until 5 the next morning, feeding from that hour until 9 or 9.30 a.m. In the winter they feed most of the short days, but when well supplied with corn and hay they rest during the middle of the day.

"In parks which are heavily stocked Deer have to work harder for their food, and rest for shorter periods. When rising from the ground they get on their knees first, then raise their hind-quarters before getting on their fore-feet. In fact, they get up as a cow does, just reversing the actions of a horse."

The Fallow Deer is said to be less delicate in the choice of its food than the Red Deer, and to browse much closer.

The males, although not so fierce as those of the Red species, frequently fight desperate battles during the rutting season.

Tree Pipit feeding Young.



"The male helps the female in the work of feeding the chicks."

THE TREE PIPIT

AFTER all that has been written and said during the last century upon British birds, I think I am quite safe in stating that nine hundred and ninety-nine people out of every thousand living in the heart of the country are unable to distinguish the Tree Pipit from its relative the Meadow Pipit, even when both species breed in proximity, and, let me hasten to add, it is not an easy matter.

The Tree Pipit is a trifle larger, has fewer and more extended spots on the breast and a shorter hind claw than its congener, but these differences are not very apparent unless the birds can be compared in hand or in captivity. They both walk, run, and wag their tails like the other members of their family, but, when we arrive at a consideration of their breeding haunts and eggs, we discover a number of helpful differences. The species under notice never breeds far from trees of some kind and generally in cultivated districts, whereas the Meadow Pipit is found nesting most numerously in wild treeless moorland parts of the country. The eggs of the former species, although subject to considerable variation, generally exhibit a warm purplish tint, which is not found in those of the latter.

The male Tree Pipit is an accomplished vocalist, and adds to the interest of his song by his peculiar method of delivering it. Rising from the topmost twig of some favourite tree he commences with a repeated note, sounding something like the word *chee-chee-chee-chee*, and when he has reached an altitude

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of twenty to sixty or seventy feet, according to the weather and the season, he glides down in a half circle on out-

TREE PIPIT COVERING CHICKS.

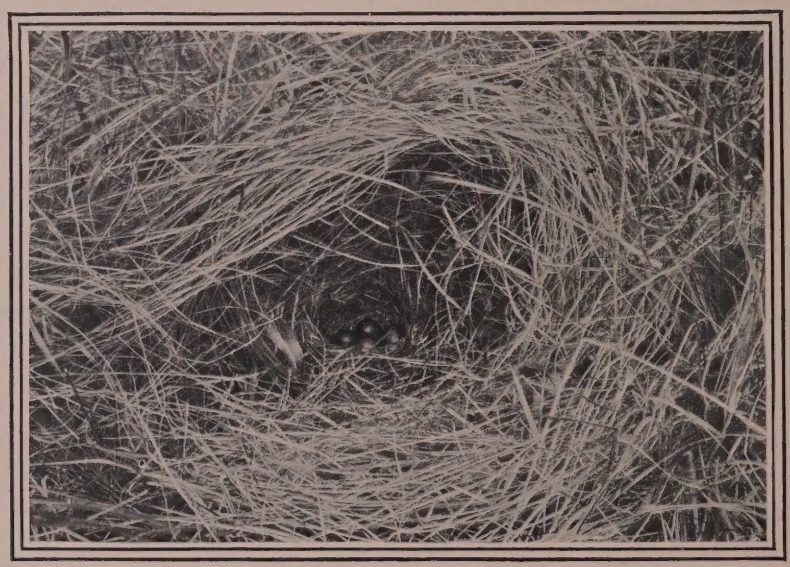
stretched wings with his tail spread and legs dangling whilst he finishes his ringing ditty. Sometimes the song is delivered from the bird's favourite perch, when it sounds somewhat suggestive of the vocal accomplishments of a canary.

The nest, which is composed of dead grass and rootlets lined with fine dry grass or hair, is placed on the ground under an overhanging tuft.

From four to six eggs are laid of a greyish white ground colour, faintly tinged with purplish brown or purple red. Sometimes the ground colour is yellowish white and the markings rich reddish brown, but, as I have already stated, they are subject to considerable variation.

The male helps the female in the work of feeding the chicks and keeping the nest clean. This species is very faithful to a favourite old haunt, but will occasionally quite desert one for a season or two without any apparent reason.

The Tree Pipit is migratory, arriving in April and departing again in September and October, whereas numbers of Meadow Pipits stay through the winter in the British Islands.



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